

2004 Chevrolet S10 Pickup

2004 SUSPENSION Rear Suspension - Blazer/S-10, Jimmy/Sonoma

2004 SUSPENSION

Rear Suspension - Blazer/S-10, Jimmy/Sonoma

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Leaf Spring to Front Bracket Nut	122 N.m	89 lb ft
Leaf Spring U-bolt Nuts	100 N.m	74 lb ft
Rear Tie Rod Axle Bracket Nuts	53 N.m	39 lb ft
Rear Tie Rod Bolt to Axle Bracket Nut	61 N.m	45 lb ft
Rear Tie Rod to Frame Bracket Nut	61 N.m	45 lb ft
Shock Absorber Lower Nut (4-Door Utility)	100 N.m	74 lb ft
Shock Absorber Lower Nut (2-Door Utility)	84 N.m	62 lb ft
Shock Absorber Upper Bolts	25 N.m	18 lb ft
Spring Shackle to Frame Nut	122 N.m	89 lb ft
Spring Shackle to Leaf Spring Nut	122 N.m	89 lb ft
Stabilizer Bar Lower Link Nut (4-Door Utility)	57 N.m	42 lb ft
Stabilizer Bar Lower Link Nut (2-Door Utility)	68 N.m	50 lb ft
Stabilizer Bar Upper Link Nut	35 N.m	25 lb ft
Stabilizer Clamp U-bolt Nuts	60 N.m	44 lb ft

REPAIR INSTRUCTIONS

TIE ROD REPLACEMENT (ZR2 MODELS)

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Support the rear axle at a curb height position.

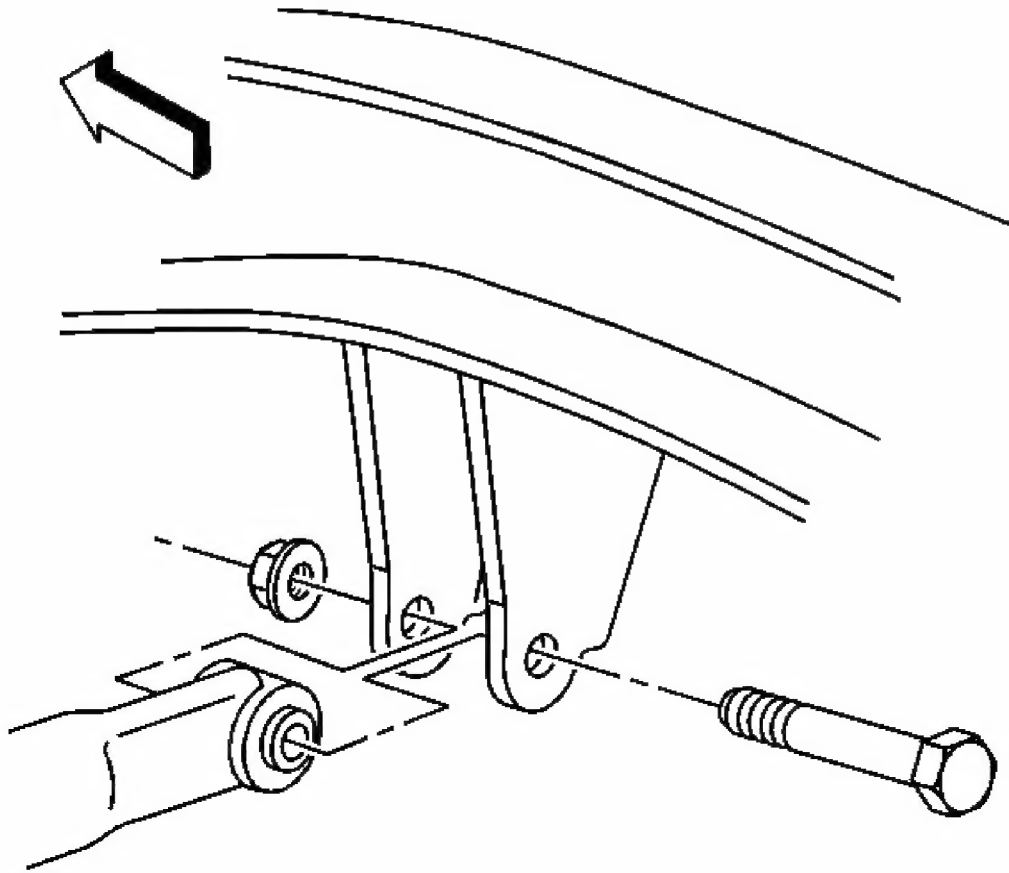


Fig. 1: View Of Rear Tie Rod Mounting Frame Bracket
Courtesy of GENERAL MOTORS CORP.

3. Remove the following parts from the frame bracket:
 - The rear tie rod mounting bolt
 - The washers
 - The rear tie rod mounting nut

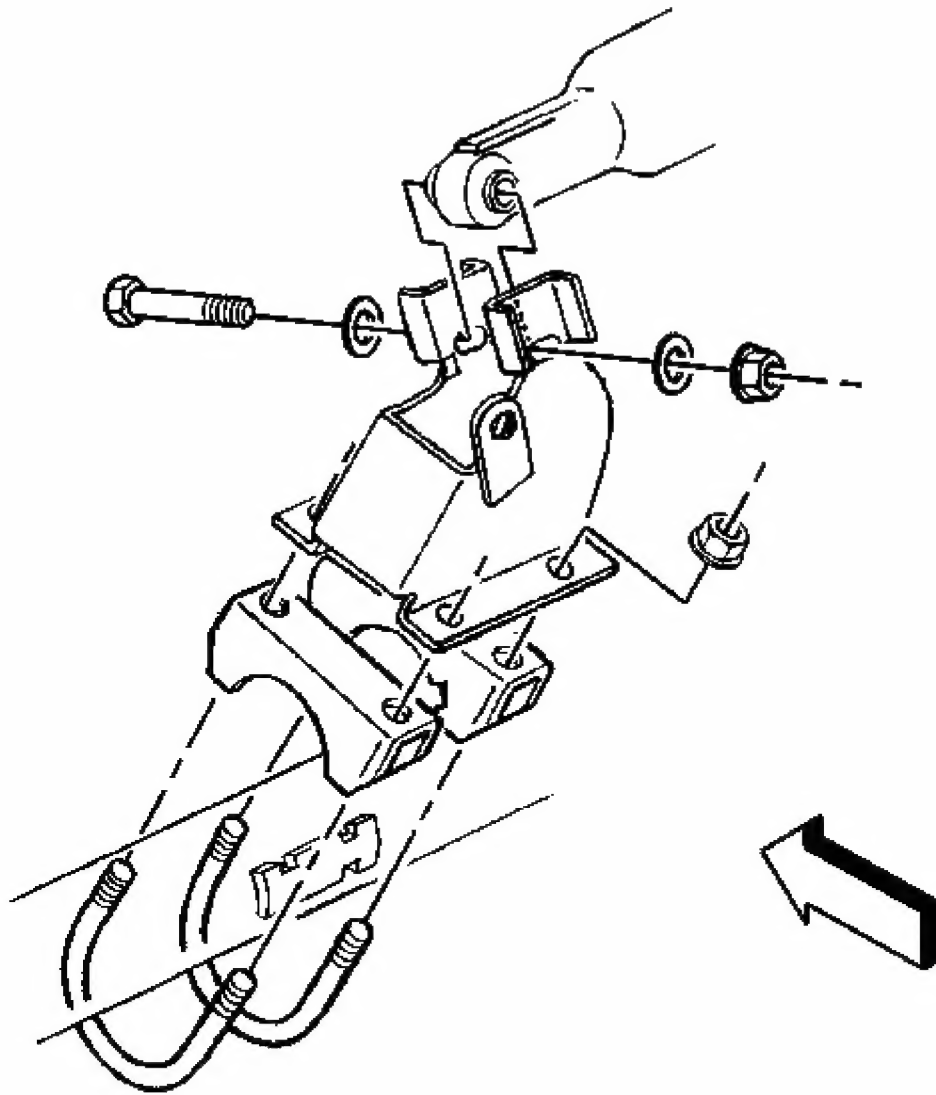


Fig. 2: View Of Rear Tie Rod Mounting Frame Bracket
Courtesy of GENERAL MOTORS CORP.

4. Remove the following parts from the axle bracket:
 - The rear tie rod mounting bolt
 - The washers
 - The rear tie rod mounting nut

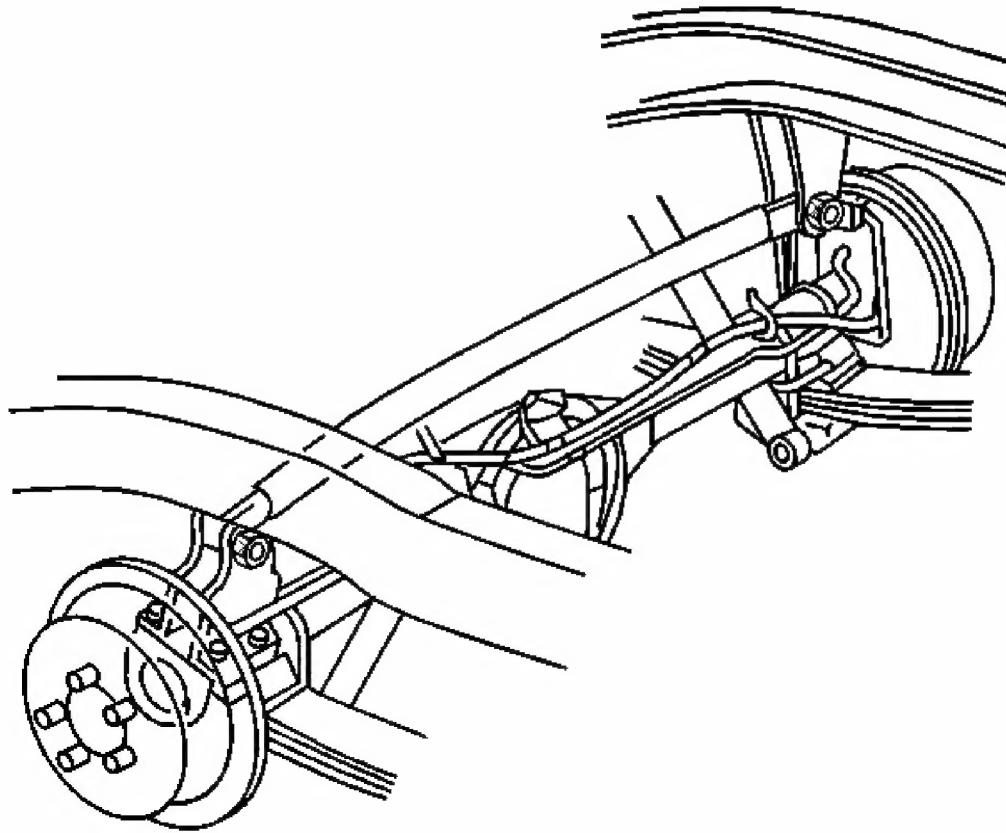


Fig. 3: View Of Rear Tie Rod
Courtesy of GENERAL MOTORS CORP.

5. Remove the rear tie rod.

Installation Procedure

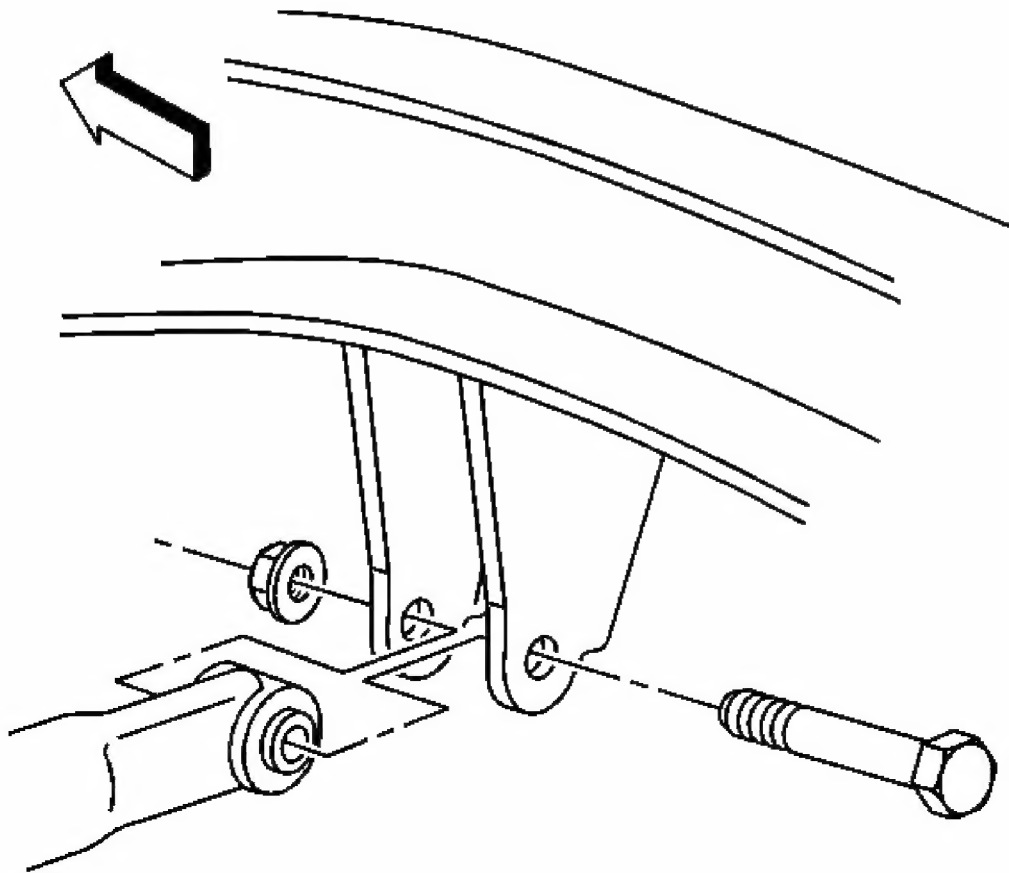


Fig. 4: View Of Rear Tie Rod Mounting Frame Bracket
Courtesy of GENERAL MOTORS CORP.

1. Position the rear tie rod in the frame bracket.

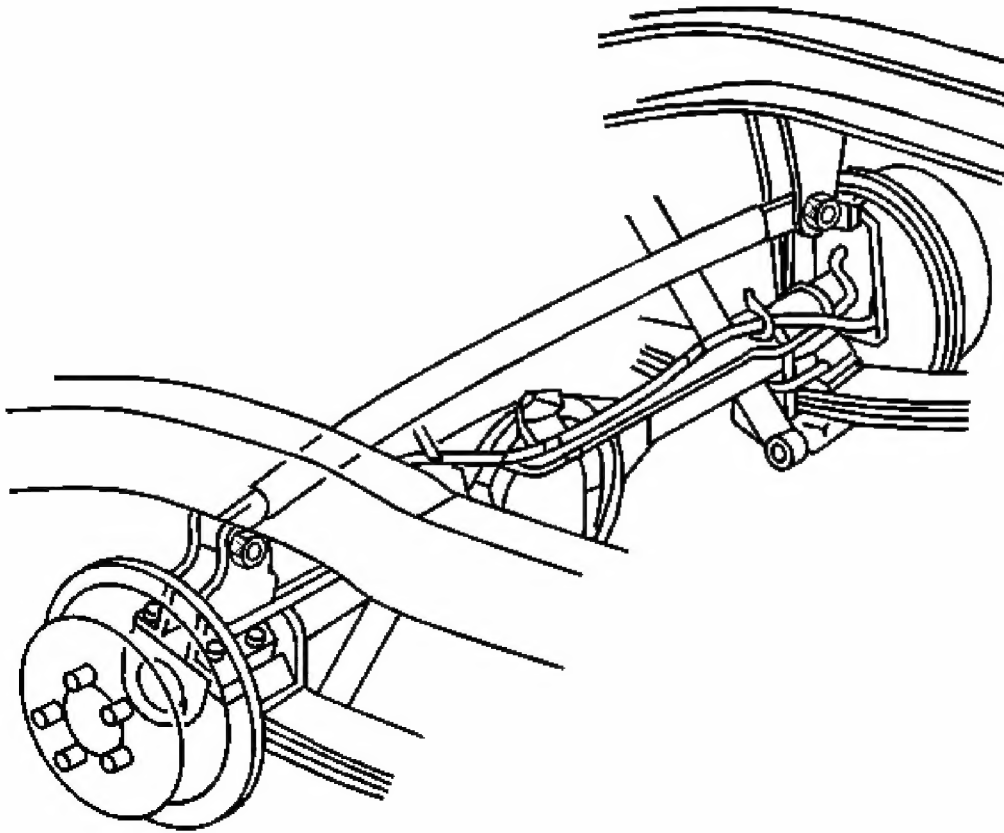


Fig. 5: View Of Rear Tie Rod
Courtesy of GENERAL MOTORS CORP.

2. Loosely install the following parts to the axle bracket:
 - The bolt
 - The washers
 - The nut

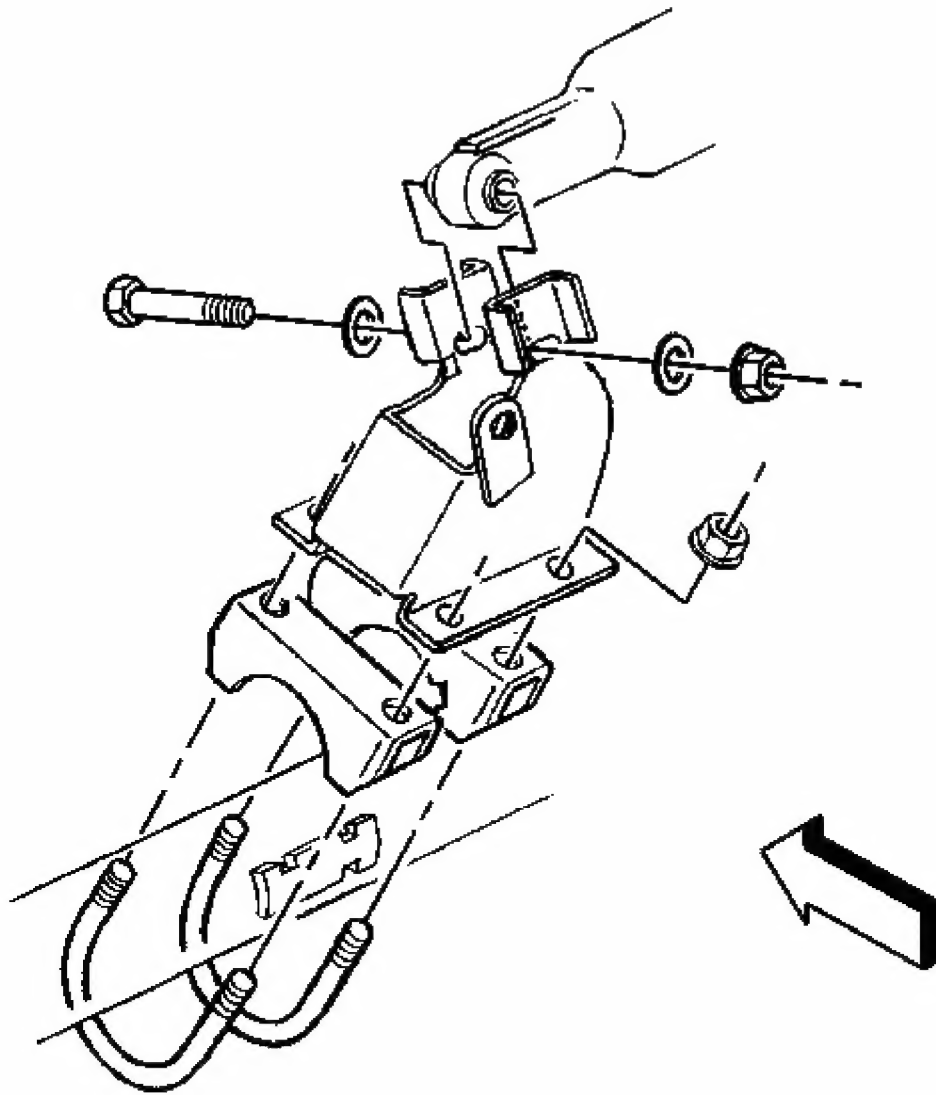


Fig. 6: View Of Axle Bracket
Courtesy of GENERAL MOTORS CORP.

3. Position the rear tie rod in the axle bracket.

NOTE: Refer to Fastener Notice in Cautions and Notices.

4. Loosely install the following parts to the frame bracket:
 - The bolt

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- The washers
- The nut

Tighten:

- Tighten the rear tie rod to axle bracket nut to 61 N.m (45 lb ft).
- Tighten the tie rod to the frame bracket nut to 61 N.m (45 lb ft).

5. Remove the rear axle support.
6. Lower the vehicle.

STABILIZER SHAFT REPLACEMENT (2-DOOR UTILITY)

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

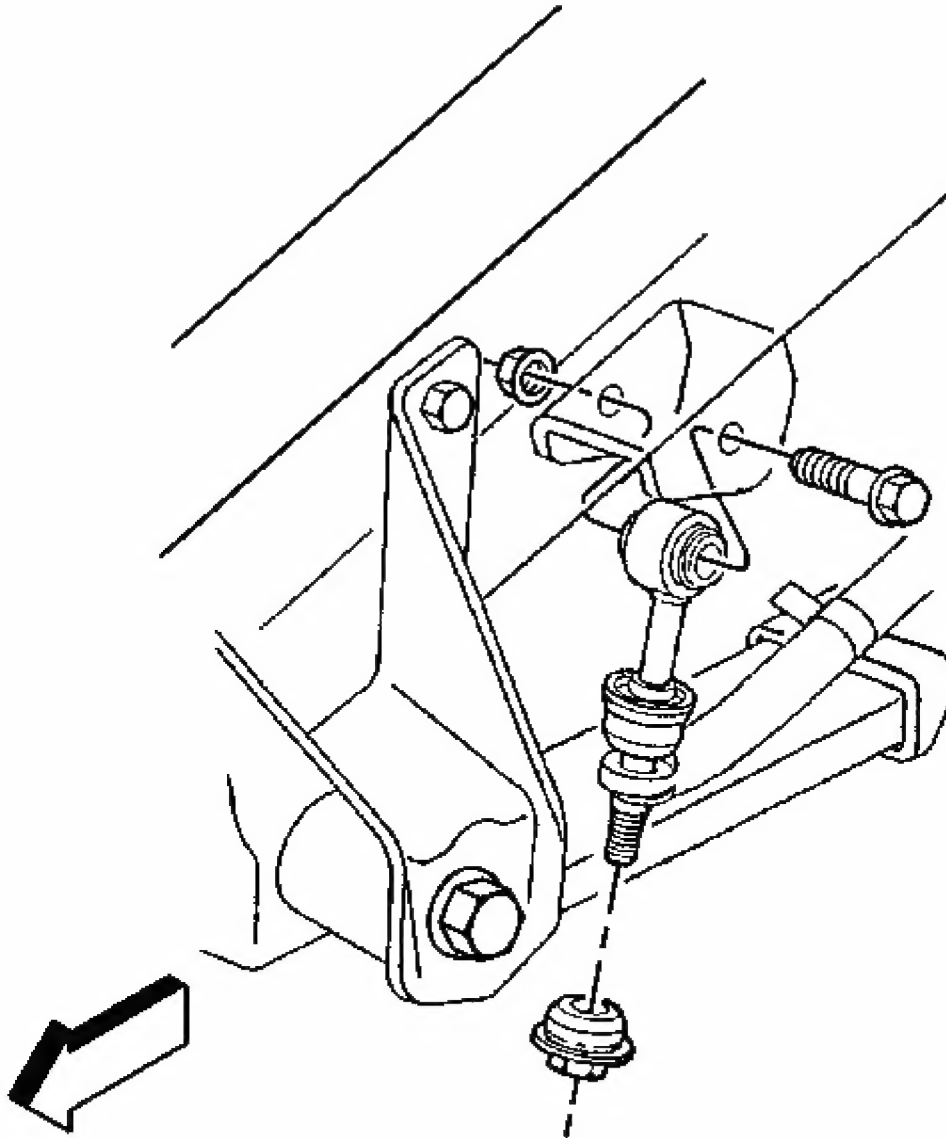


Fig. 7: View Of Stabilizer Link
Courtesy of GENERAL MOTORS CORP.

2. Remove the following parts from the stabilizer links:
 - The lower nuts
 - The washers
 - The bolts

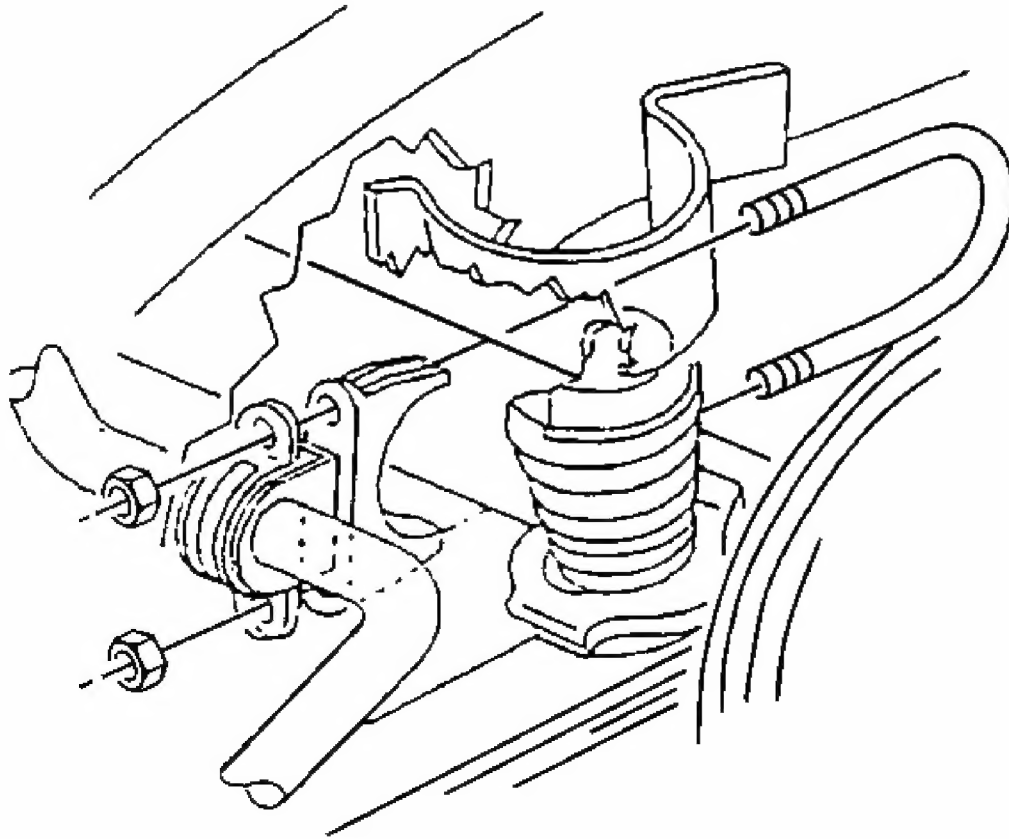


Fig. 8: View Of Stabilizer Shaft U-Bolts
Courtesy of GENERAL MOTORS CORP.

3. Remove the nuts from the U-bolts.
4. Remove the following parts:
 - The U-bolts
 - The clamps
 - The insulators
5. Remove the stabilizer shaft.

Installation Procedure

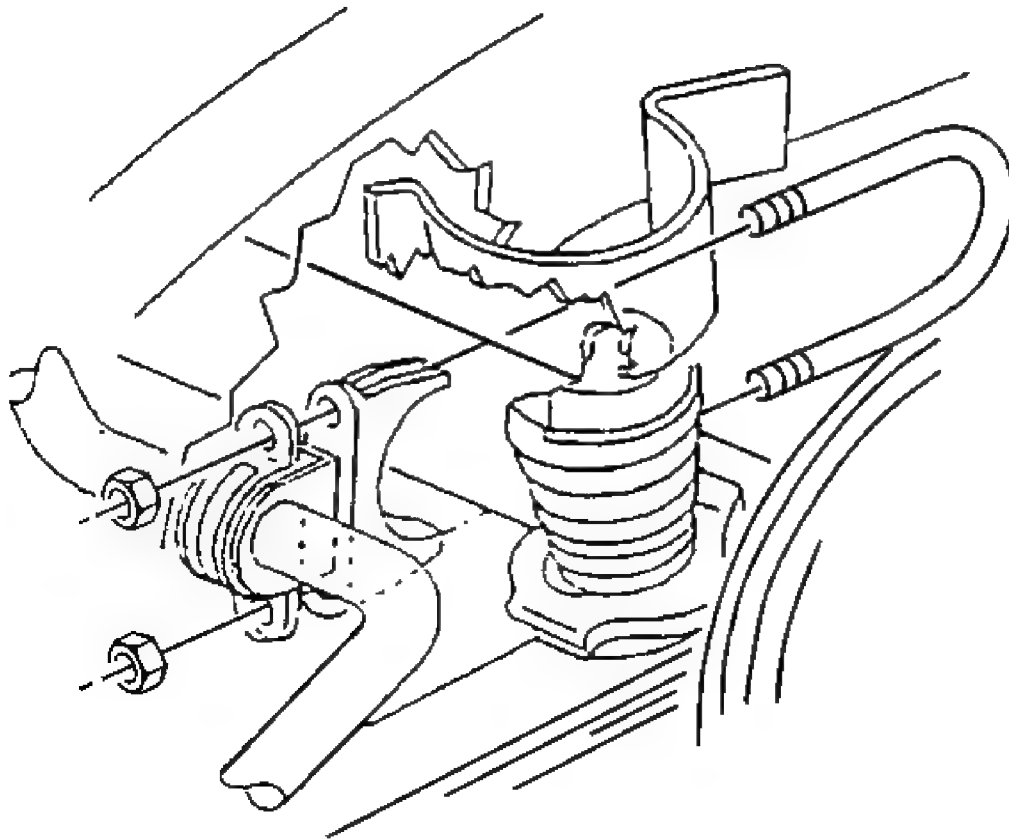


Fig. 9: View Of Stabilizer Shaft U-Bolts
Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft to the rear axle.
2. Install the following parts:
 - The insulators
 - The clamps
 - The U-bolts

NOTE: **Refer to Fastener Notice in Cautions and Notices.**

3. Install the nuts to the U-bolts.

Tighten: Tighten the nuts to 60 N.m (44 lb ft).

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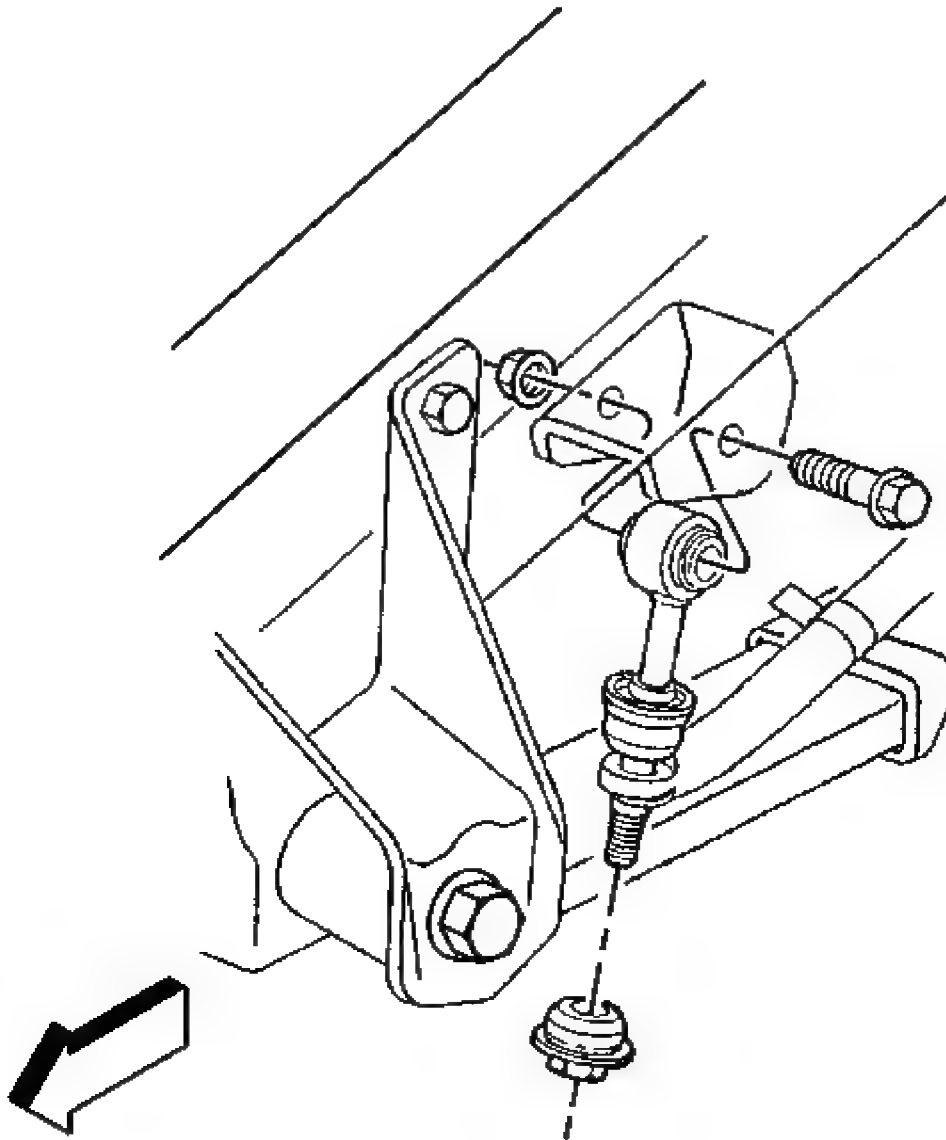


Fig. 10: View Of Stabilizer Link
Courtesy of GENERAL MOTORS CORP.

4. Install the stabilizer shaft to the link mounting bolt.
5. Install the stabilizer shaft to the link nut.

Tighten: Tighten the link nut to 68 N.m (50 lb ft).

6. Lower the vehicle.

STABILIZER SHAFT REPLACEMENT (4-DOOR UTILITY)

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

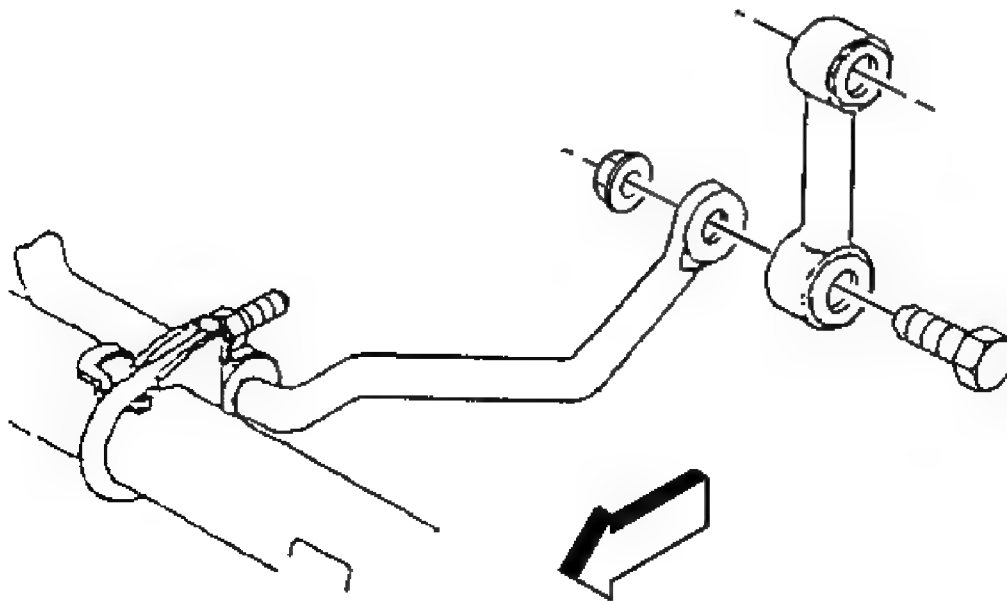


Fig. 11: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

2. Remove the stabilizer links to stabilizer shaft nuts and bolts.

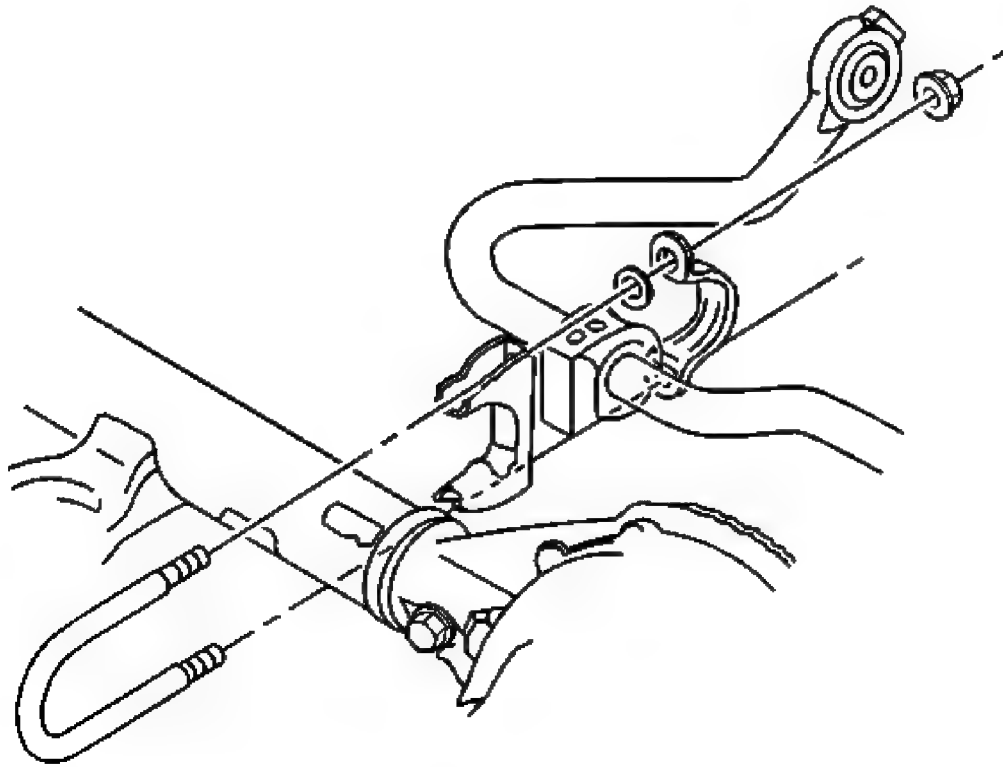


Fig. 12: View Of Stabilizer Shaft U-Bolt
Courtesy of GENERAL MOTORS CORP.

3. Remove the stabilizer shaft U-bolt nuts.
4. Remove the stabilizer shaft U-bolts and clamps.
5. Remove the stabilizer shaft insulators.
6. Remove the stabilizer shaft.

Installation Procedure

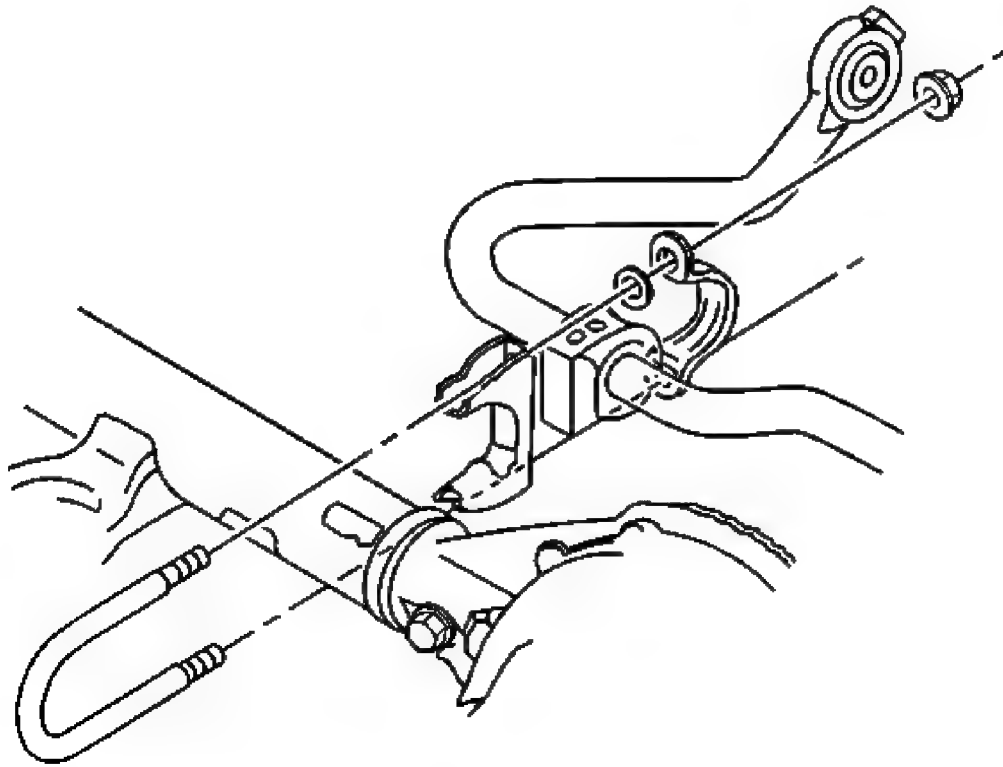


Fig. 13: View Of Stabilizer Shaft U-Bolt
Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft to the rear axle.
2. Install the stabilizer shaft insulators.
3. Install the stabilizer shaft U-bolts and clamps.

NOTE: **Refer to Fastener Notice in Cautions and Notices.**

4. Install the stabilizer shaft U-bolt nuts.

Tighten: Tighten the nuts to 60 N.m (44 lb ft).

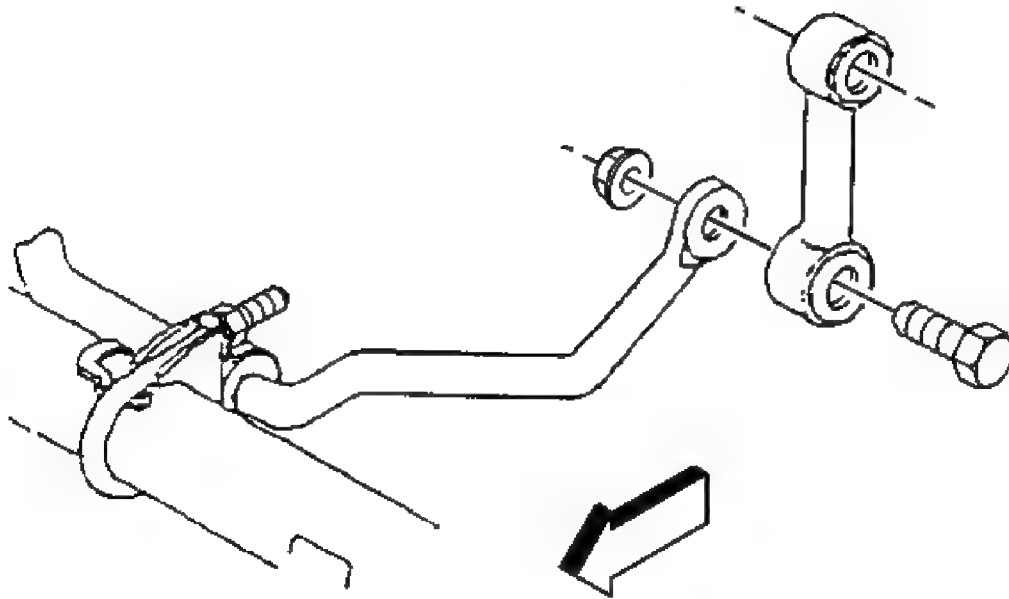


Fig. 14: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

5. Install the stabilizer shaft link to the stabilizer shaft mounting bolts.
6. Install the stabilizer shaft link to the stabilizer shaft nuts.

Tighten: Tighten the nuts to 57 N.m (42 lb ft).

7. Lower the vehicle.

STABILIZER SHAFT LINK REPLACEMENT (4-DOOR UTILITY)

Removal Procedure

1. Raise and suitably support the vehicle. Refer to Lifting and Jacking the Vehicle in General Information.

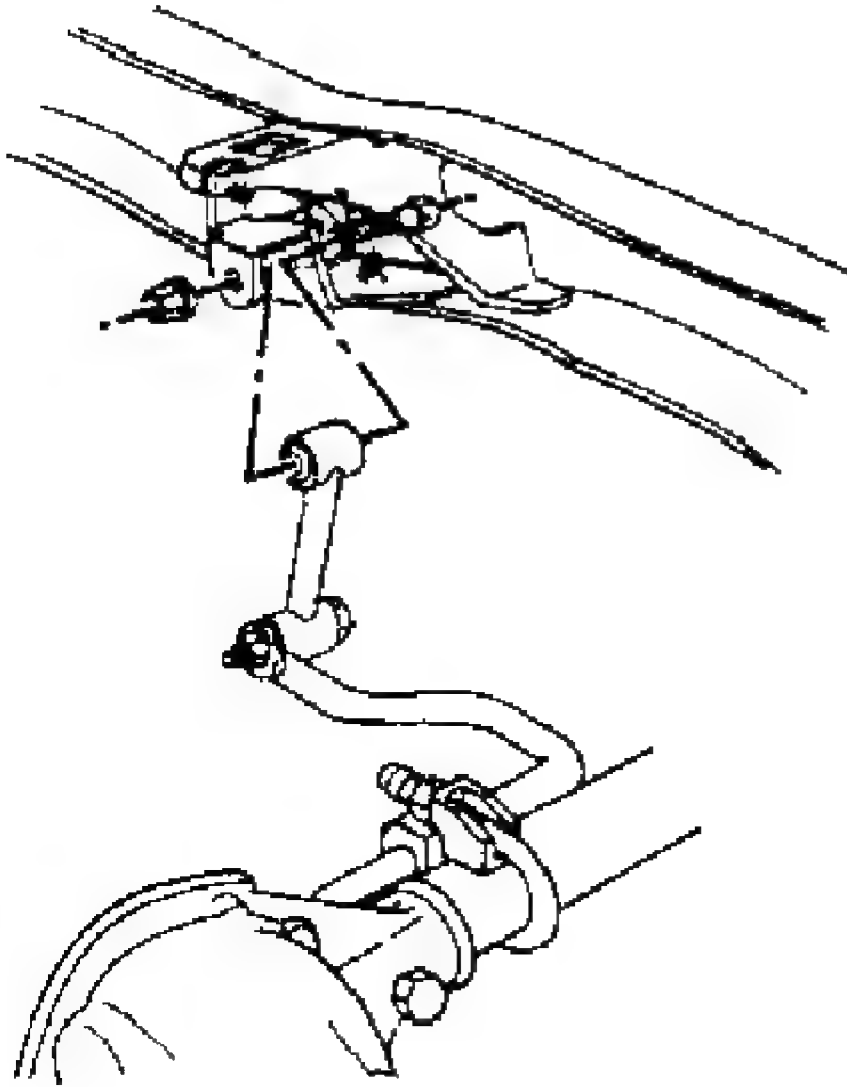


Fig. 15: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

2. Remove the stabilizer shaft link upper nut and bolt.

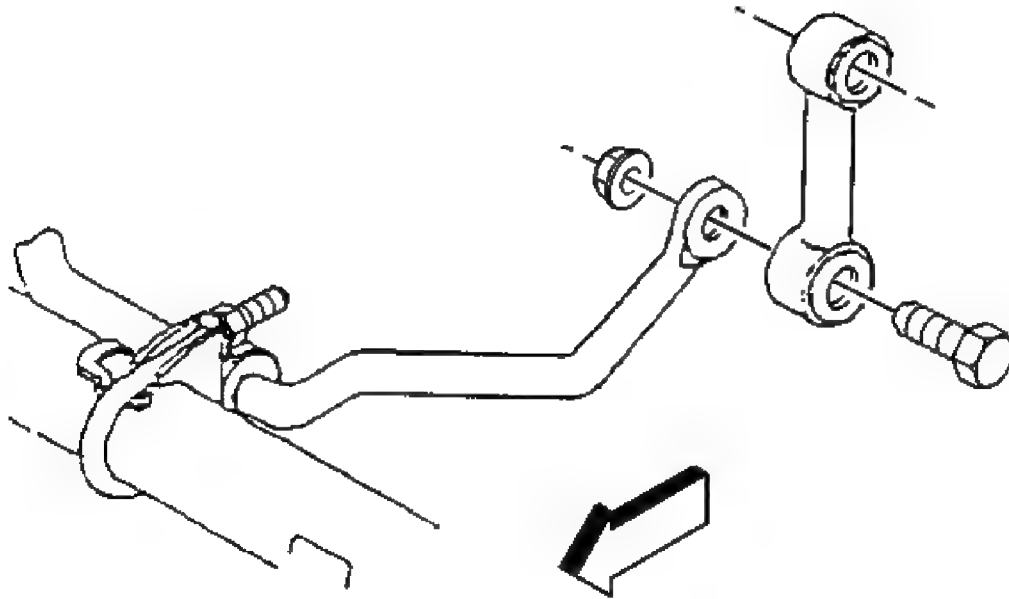


Fig. 16: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

3. Remove the stabilizer shaft link lower nut and bolt.
4. Remove the stabilizer shaft link

Installation Procedure

1. Install the stabilizer shaft.
2. Install the stabilizer shaft link lower mounting bolt.

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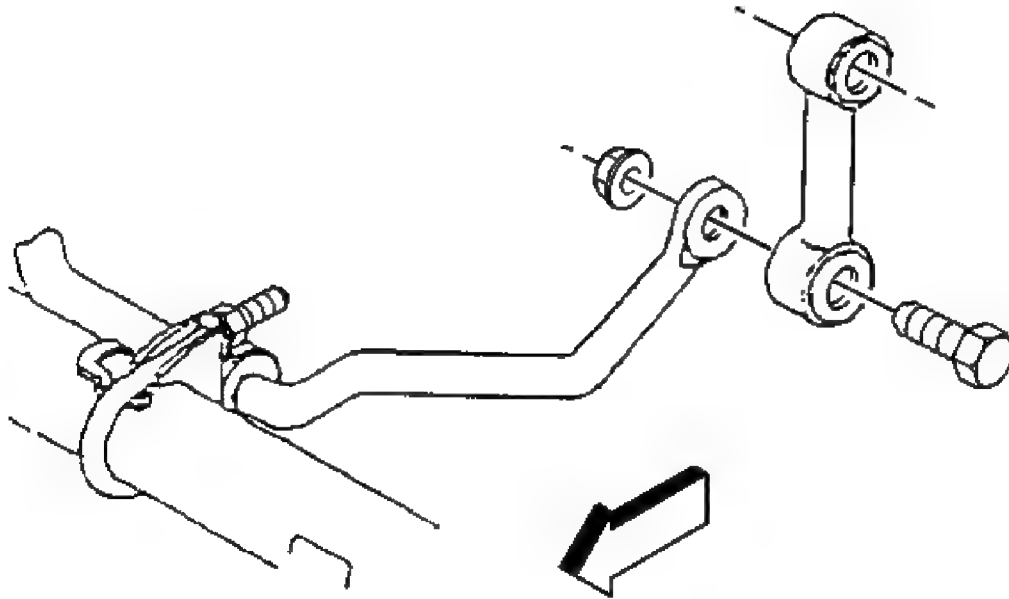


Fig. 17: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

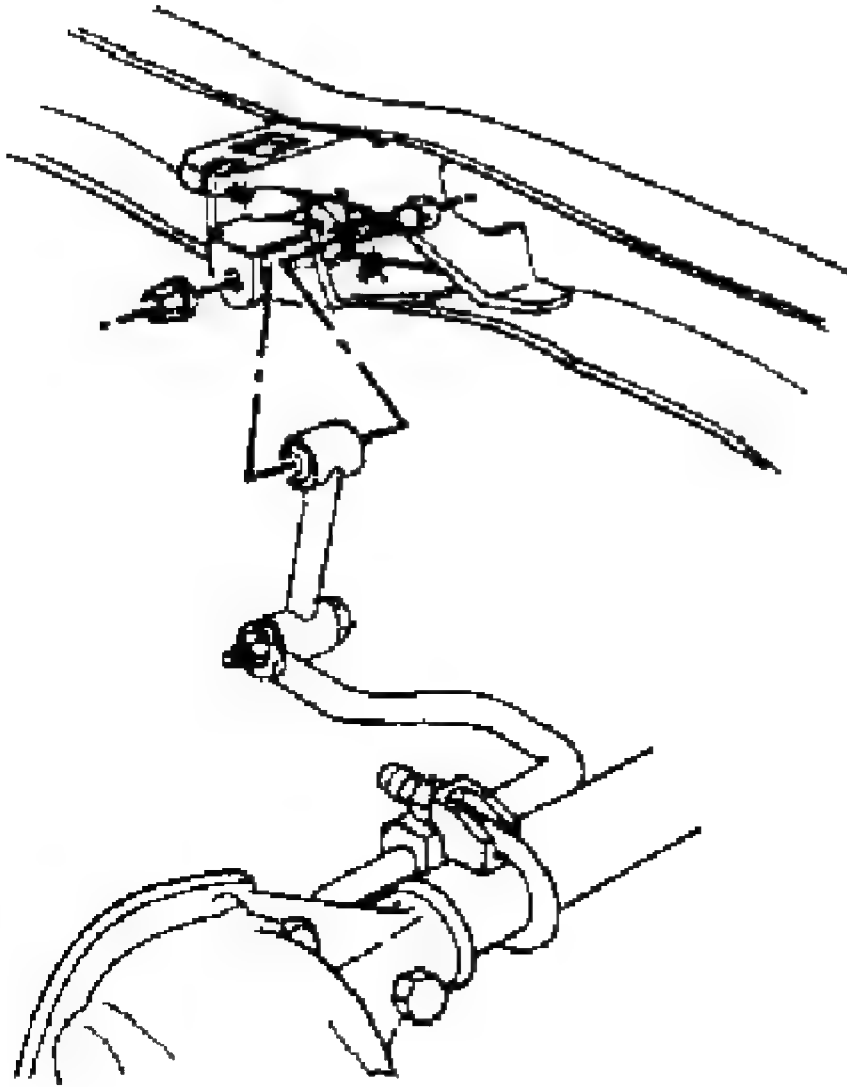


Fig. 18: View Of Stabilizer Shaft Link
Courtesy of GENERAL MOTORS CORP.

3. Install the stabilizer shaft link upper mounting bolt.

NOTE: **Refer to Fastener Notice in Cautions and Notices.**

4. Install the stabilizer shaft link mounting nuts.

Tighten:

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- Tighten the stabilizer shaft link lower mounting nut to 57 N.m (42 lb ft).
- Tighten the stabilizer shaft link upper mounting nut to 35 N.m (25 lb ft).

5. Lower the vehicle.

STABILIZER SHAFT LINK REPLACEMENT (2-DOOR UTILITY)

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

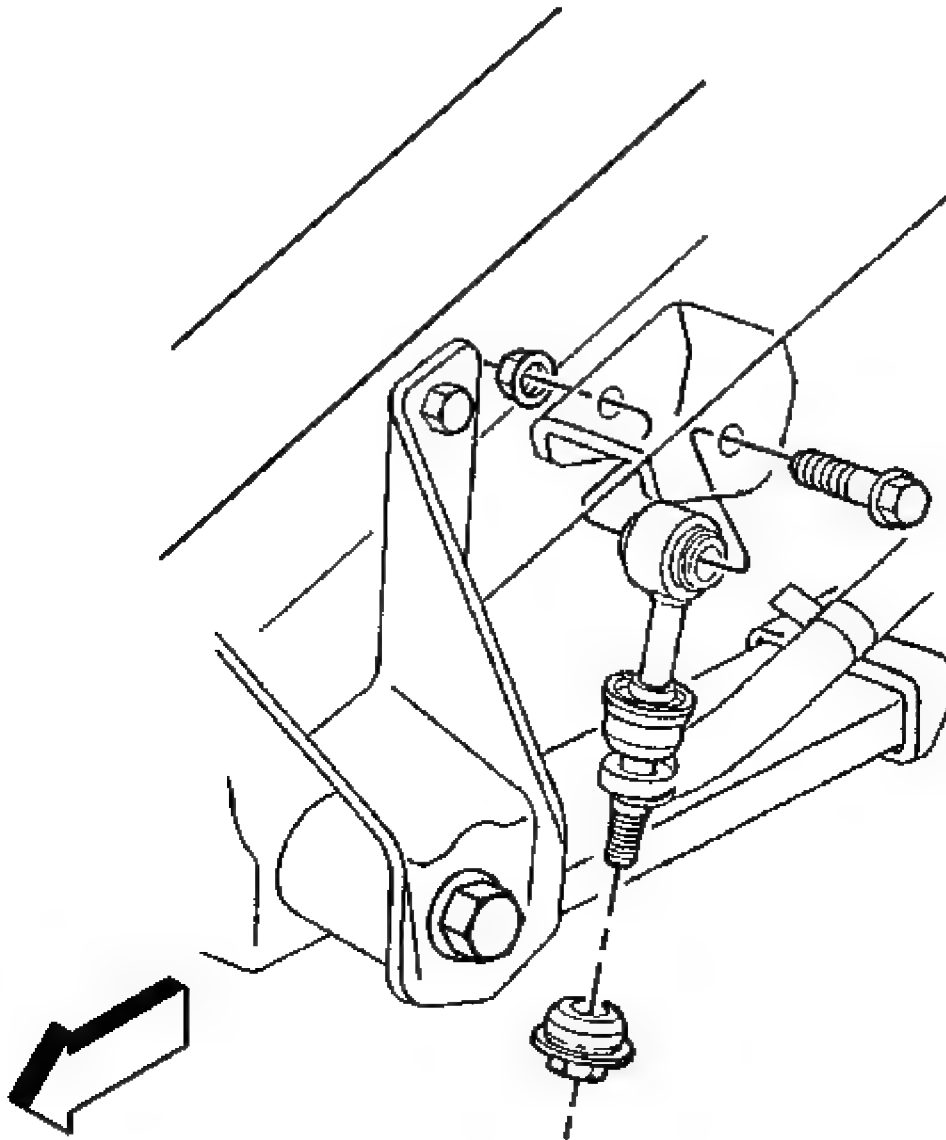


Fig. 19: View Of Stabilizer Link
Courtesy of GENERAL MOTORS CORP.

2. Remove the stabilizer shaft link upper mounting bolt and nut.
3. Remove the stabilizer shaft link lower mounting nut.
4. Remove the stabilizer shaft link.

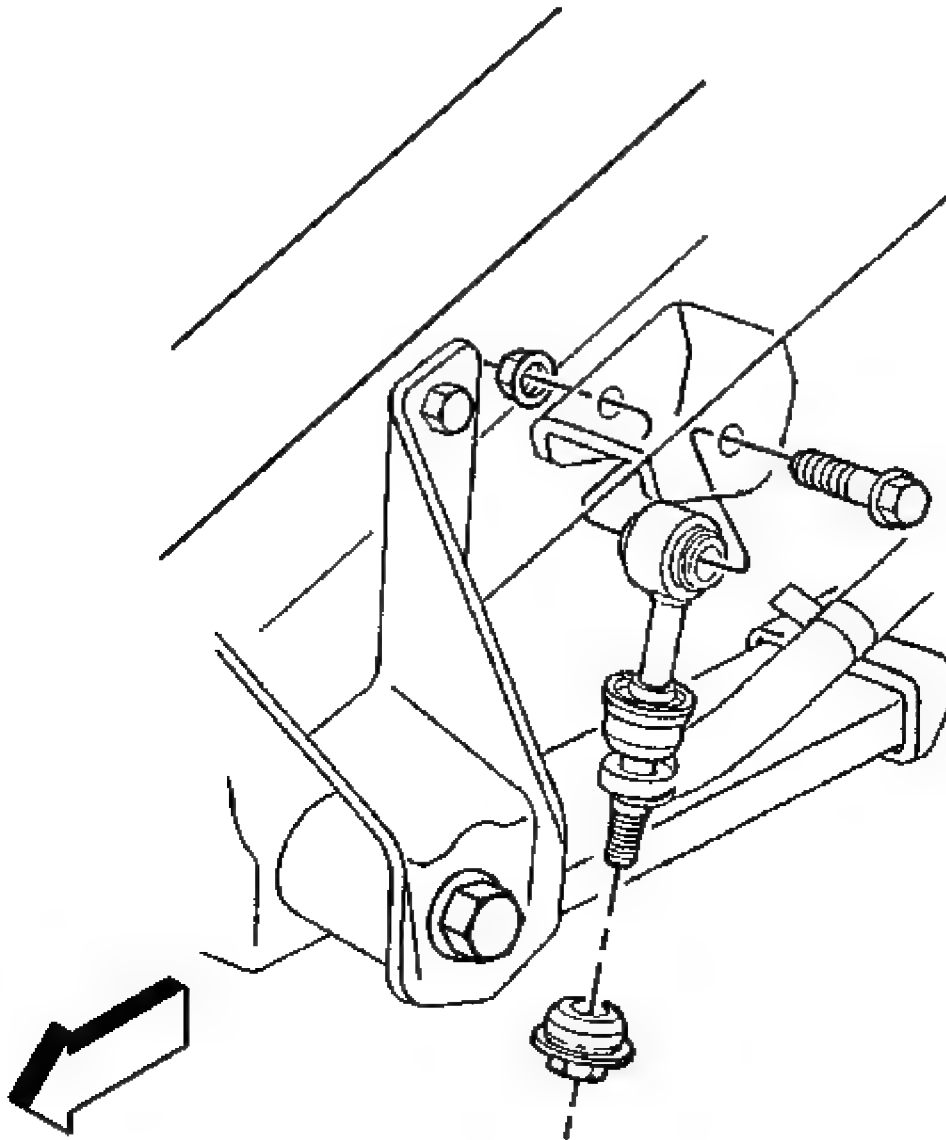


Fig. 20: View Of Stabilizer Link
Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft link.
2. Install the stabilizer shaft link lower mounting nut.
3. Install the stabilizer shaft link upper mounting bolt and nut.

NOTE: **Refer to Fastener Notice in Cautions and Notices.**

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4. Tighten the stabilizer shaft link mounting nuts.

Tighten:

- Tighten the stabilizer shaft link lower mounting nut to 68 N.m (50 lb ft).
- Tighten the stabilizer shaft link upper mounting nut to 35 N.m (25 lb ft).

5. Lower the vehicle.

SHOCK ABSORBER REPLACEMENT

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Support the rear axle.
3. Disconnect automatic level control air lines from shock absorber, if equipped.

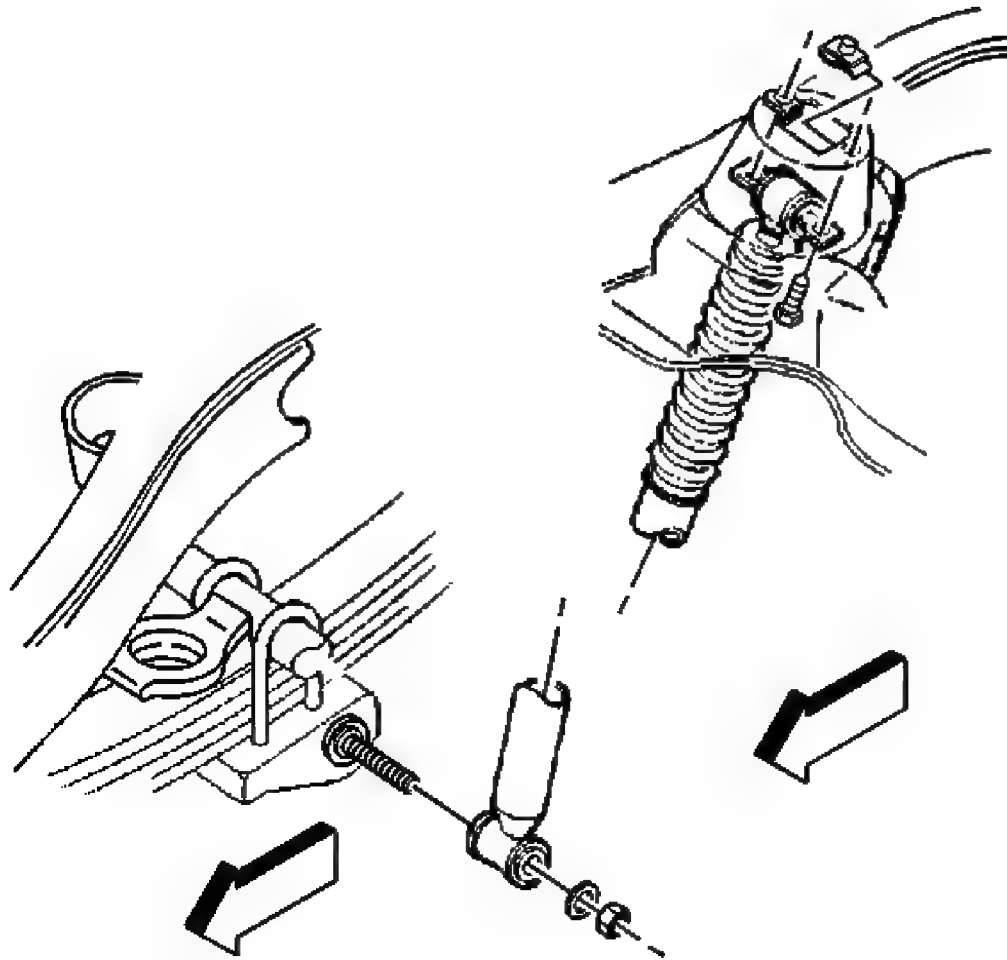


Fig. 21: View Of Shock Absorber Assembly
Courtesy of GENERAL MOTORS CORP.

4. Remove the shock absorber upper mounting bolts.
5. Remove the shock absorber lower mounting nut.
6. Remove the shock absorber lower mounting bolt (four door utilities only).
7. Remove the shock absorber from the vehicle.

Installation Procedure

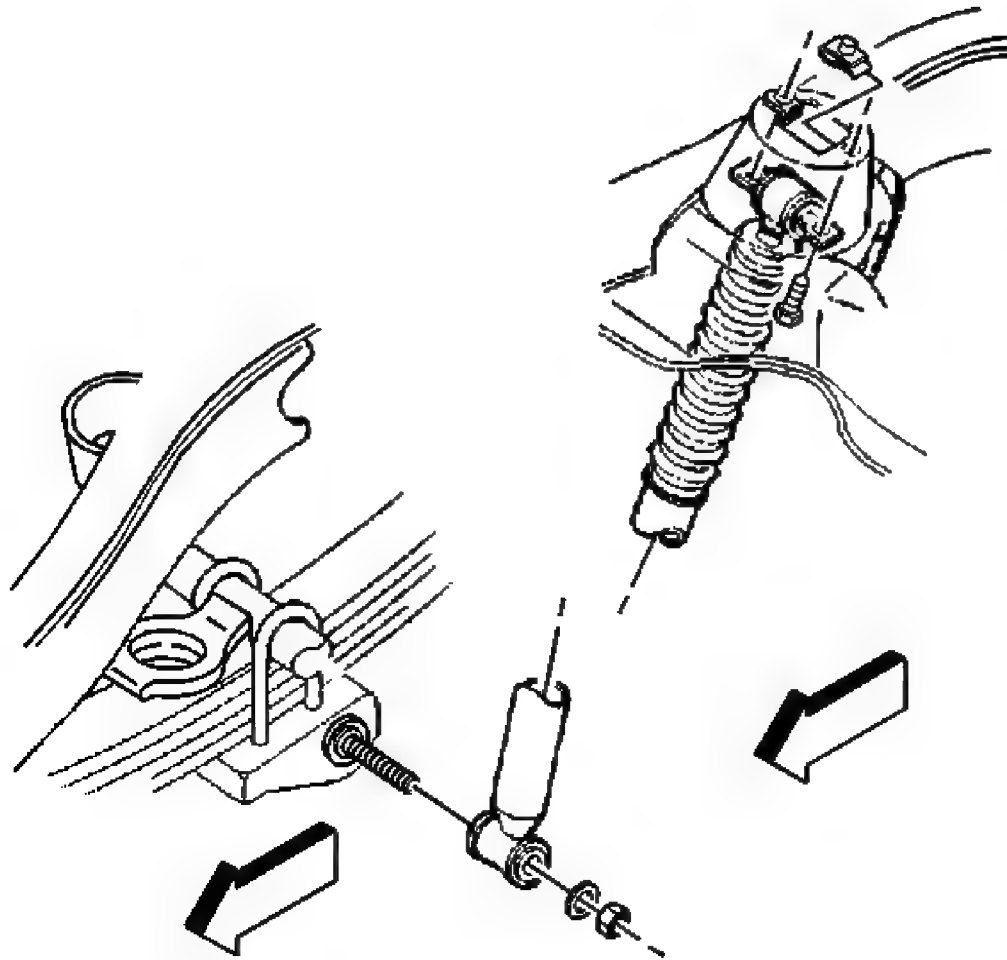


Fig. 22: View Of Shock Absorber Assembly
Courtesy of GENERAL MOTORS CORP.

1. Install the shock absorber to the vehicle.
2. Install the shock absorber lower mounting bolt (four door utilities only).

NOTE: **Refer to Fastener Notice in Cautions and Notices.**

3. Install the shock absorber upper mounting bolts.

Tighten: Tighten the shock absorber upper mounting bolts to 25 N.m (18 lb ft).

4. Install the shock absorber lower mounting nut.

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Tighten:

- Tighten the shock absorber lower mounting nut to 84 N.m (62 lb ft) on 2-door utility models.
 - Tighten the shock absorber lower mounting nut to 100 N.m (74 lb ft) on 4-door utility models.
5. Connect automatic level control air line to shock absorber, if equipped.
 6. Remove the rear axle support.
 7. Lower the vehicle.

SHOCK ABSORBER DISPOSAL

CAUTION: Gas charged shock absorbers contain high pressure gas. Do not remove the snap ring from inside the top of the tube. If the snap ring is removed, the contents of the shock absorber will come out with extreme force which may result in personal injury.

CAUTION: To prevent personal injury, wear safety glasses when centerpunching and drilling the shock absorber. Use care not to puncture the shock absorber tube with the centerpunch.

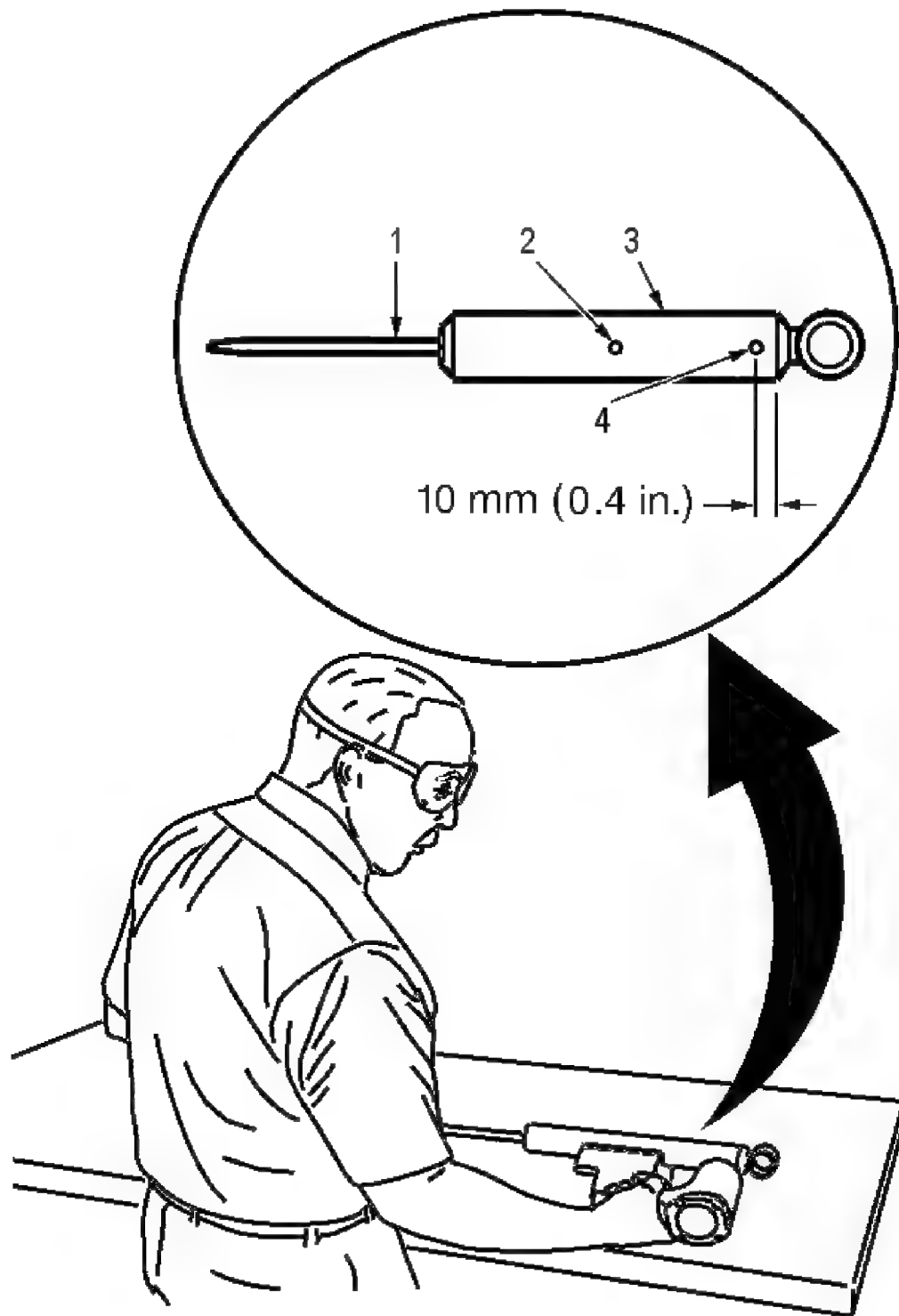


Fig. 23: Drilling Hole In Shock Absorber At Centerpunched Locations
Courtesy of GENERAL MOTORS CORP.

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1. Make an indentation 10 mm (0.4 in) from the bottom (4) of the tube (3) using a centerpunch.
2. Clamp the shock absorber in a vise horizontally with the shock absorber rod (1) completely extended.
3. Drill a hole in the shock absorber at the centerpunch (4) using a 5 mm (3/16 in) drill bit. Gas or a gas/oil mixture will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
4. Make an indentation in the middle (2) of the tube (3) with a centerpunch.
5. Drill a second hole in the shock absorber at the centerpunch (2) using a 5 mm (3/16 in) drill bit. Oil will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
6. Remove the shock absorber from the vise. Hold the shock absorber over a drain pan horizontally with the holes down. Move the rod (1) in and out of the tube (3) to completely drain the oil from the shock absorber.

SPRING BUSHING REPLACEMENT

Removal Procedure

1. Remove the leaf spring from the vehicle. Refer to **Leaf Spring Replacement**.

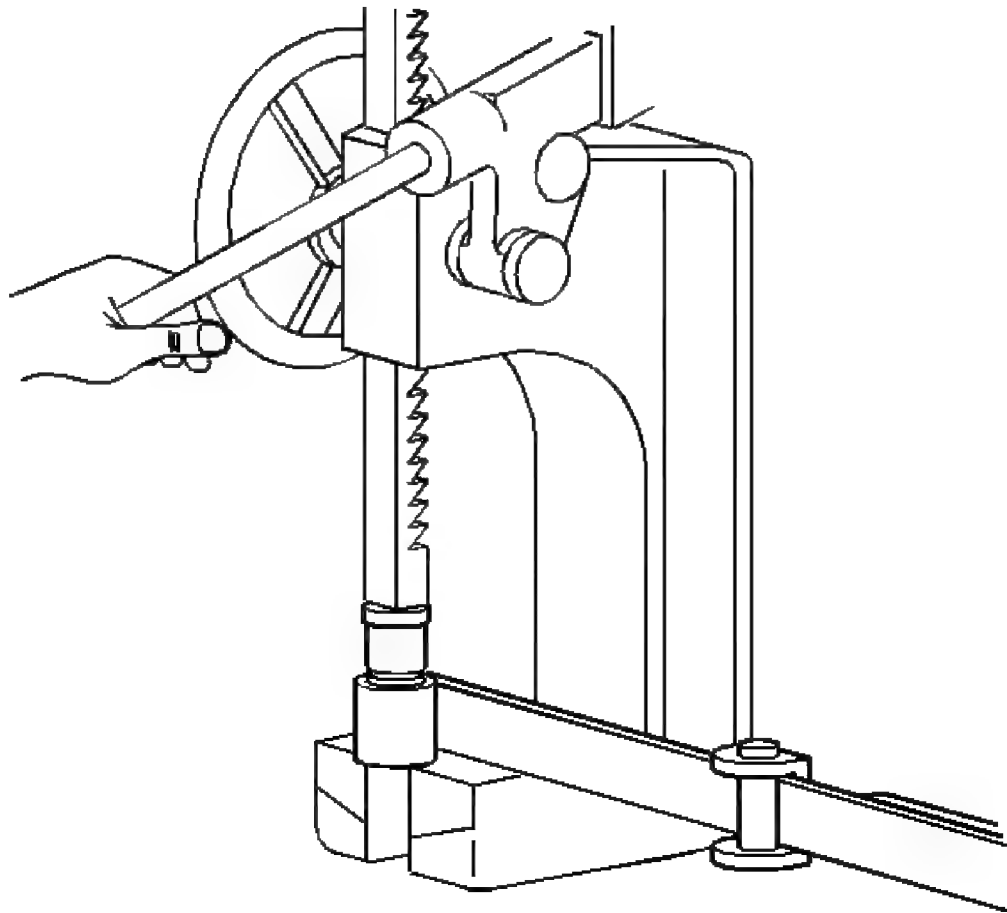


Fig. 24: Using Arbor Press To Replace Spring Bushing
Courtesy of GENERAL MOTORS CORP.

2. Remove the bushing from the spring assembly. Press the spring bushing from the spring in an arbor press.
3. Clean the spring eye of any remaining parts of the bushing.
4. Remove any burrs from the spring eye that could cause the new bushing to bind when the bushing is installed.

Installation Procedure

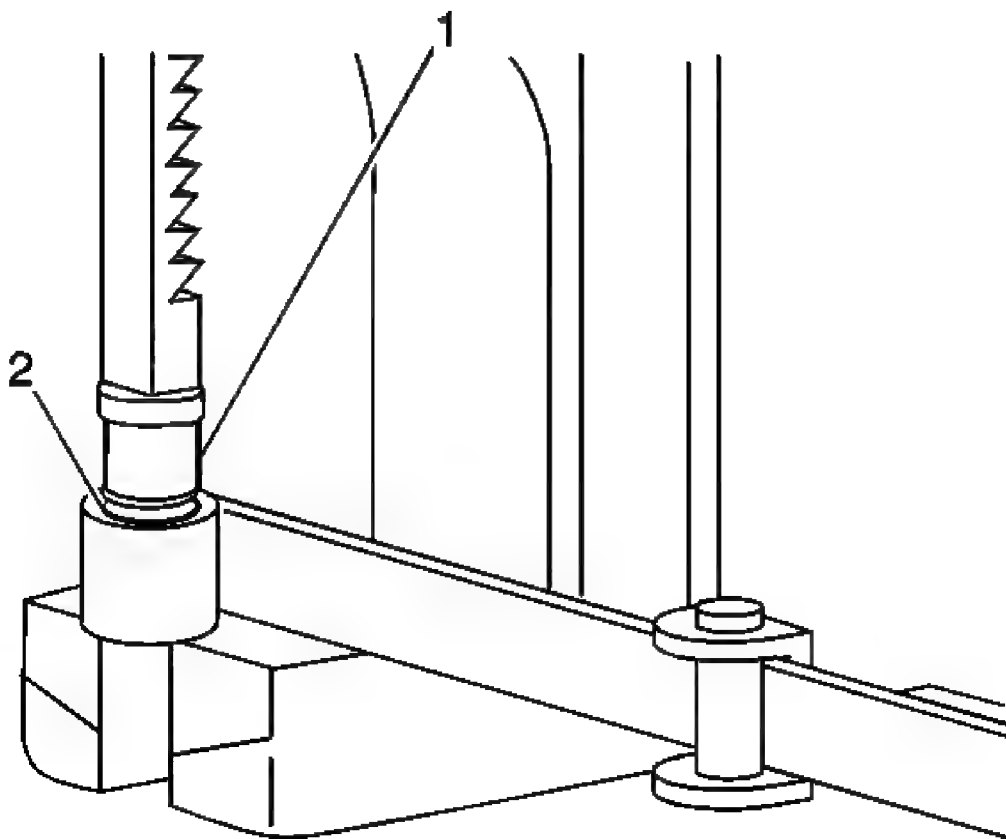


Fig. 25: Locating Spring Bushing Lubricant Points
Courtesy of GENERAL MOTORS CORP.

1. Apply rubber lubricant to the bushing (1). Apply lubricant to the spring eye (2).

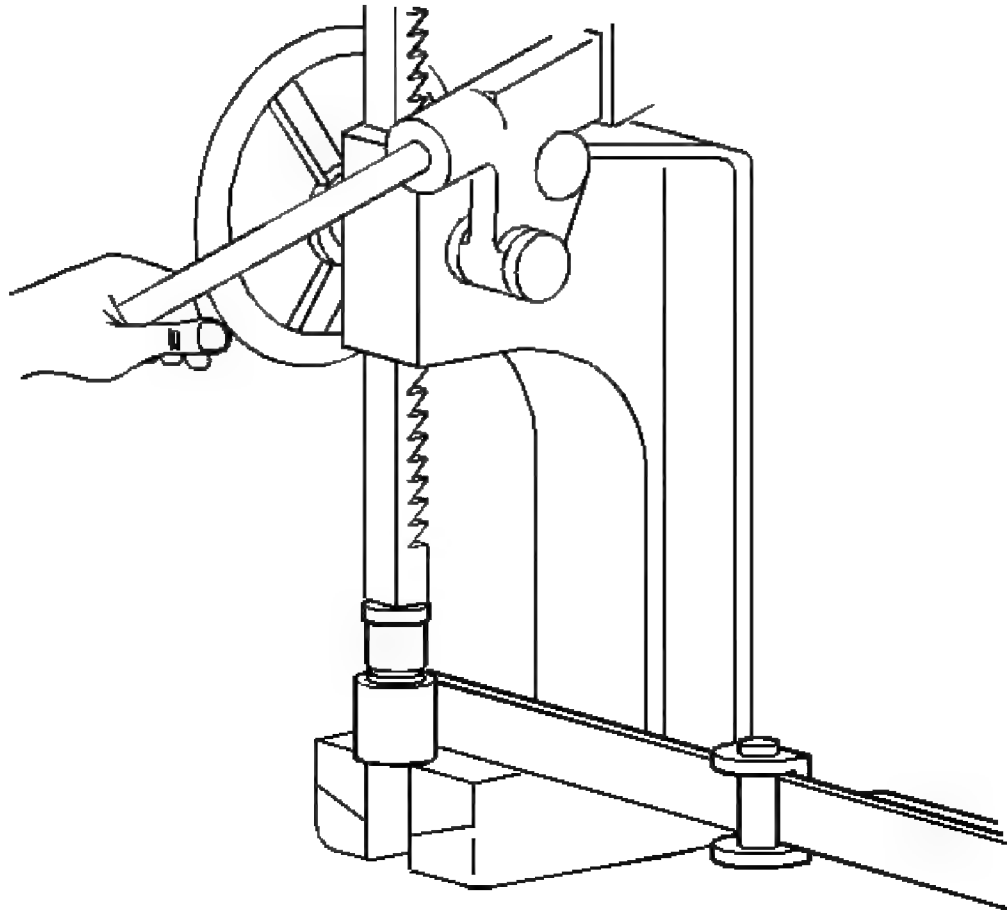


Fig. 26: Using Arbor Press To Replace Spring Bushing
Courtesy of GENERAL MOTORS CORP.

2. Install the bushing to the spring assembly. Press the bushing into the spring using an arbor press.
3. Install the leaf spring to the vehicle. Refer to **Leaf Spring Replacement**.

LEAF SPRING REPLACEMENT

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the fuel tank except crew cab and ZR2 models. Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls - 4.3L.

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3. Remove the EVAP canister 2-door utilities only, except ZR2 models. Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls - 4.3L.
4. Remove the spare tire, if necessary.
5. Remove the muffler, if necessary. Refer to **Muffler Replacement (Pickup 4.3L)** or **Muffler Replacement (Utility 4.3L)** in Engine Exhaust.
6. Support the rear axle in order to relieve the tension on the leaf springs.

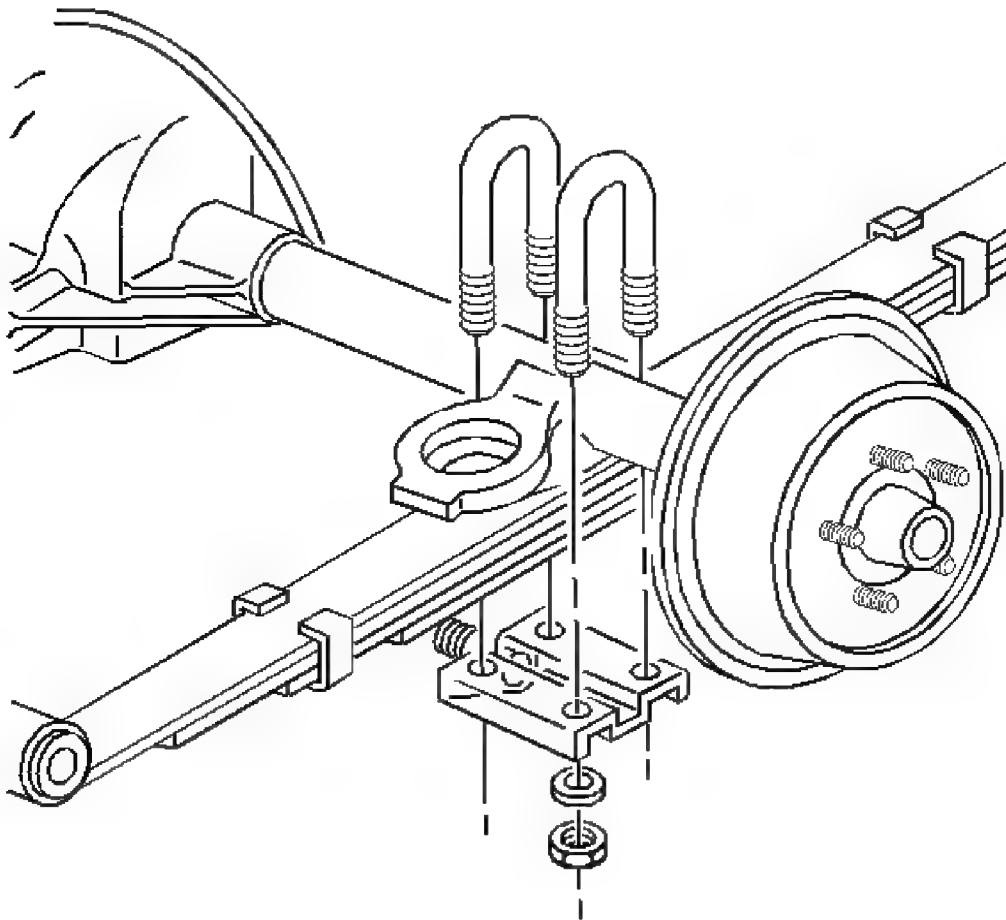


Fig. 27: View Of Leaf Spring U-Bolts
Courtesy of GENERAL MOTORS CORP.

7. Remove the leaf spring U-bolt retaining nuts.
8. Remove the leaf spring U-bolts.
9. Rotate anchor plate out of way.

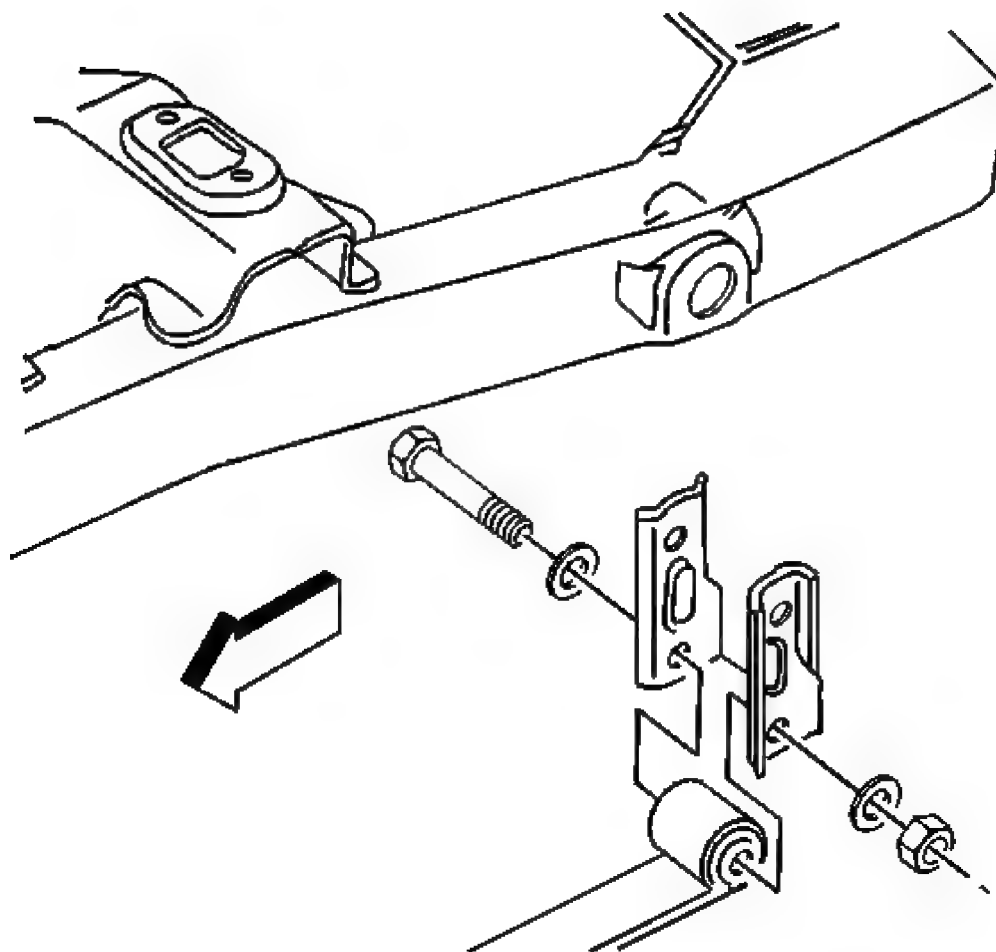


Fig. 28: View Of Spring Shackle To Leaf Spring Mounting Nut & Bolt
Courtesy of GENERAL MOTORS CORP.

10. Remove the spring shackle to leaf spring mounting nut and bolt.

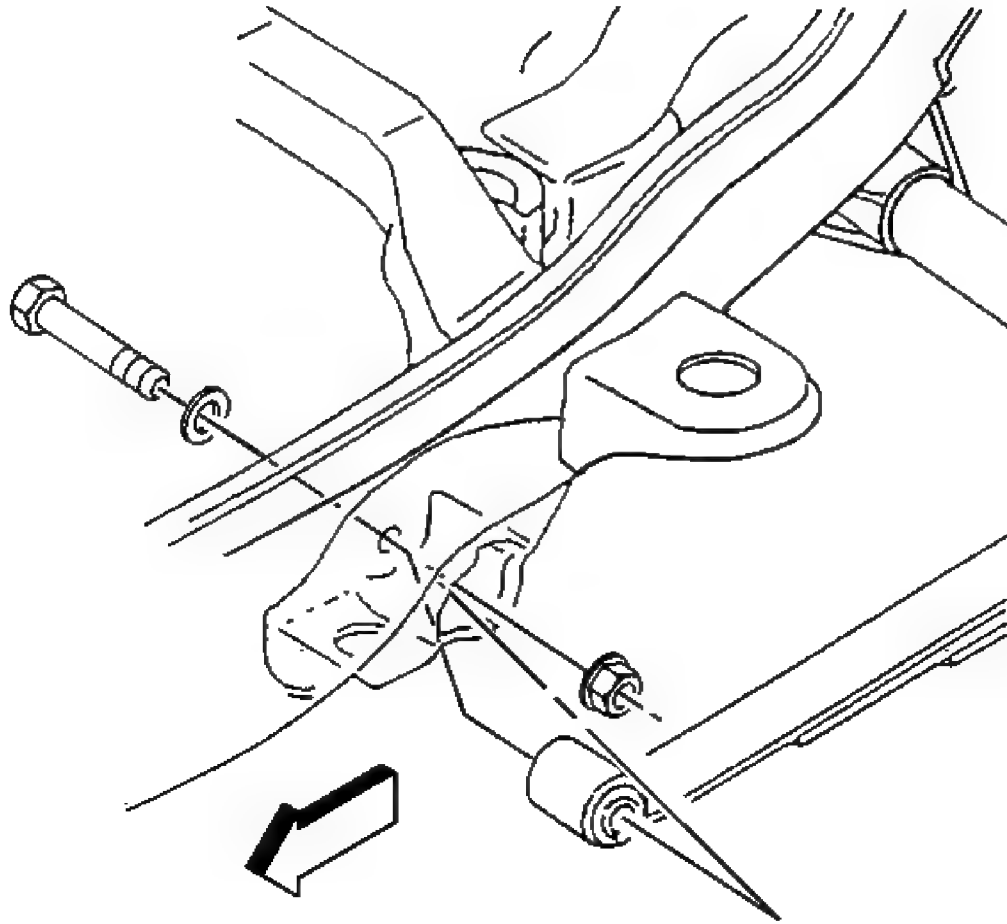


Fig. 29: View Of Leaf Spring To Front Bracket Mounting Nut & Bolt
Courtesy of GENERAL MOTORS CORP.

11. Remove the leaf spring to front bracket mounting nut and bolt.
12. Remove the leaf spring from the vehicle.

Installation Procedure

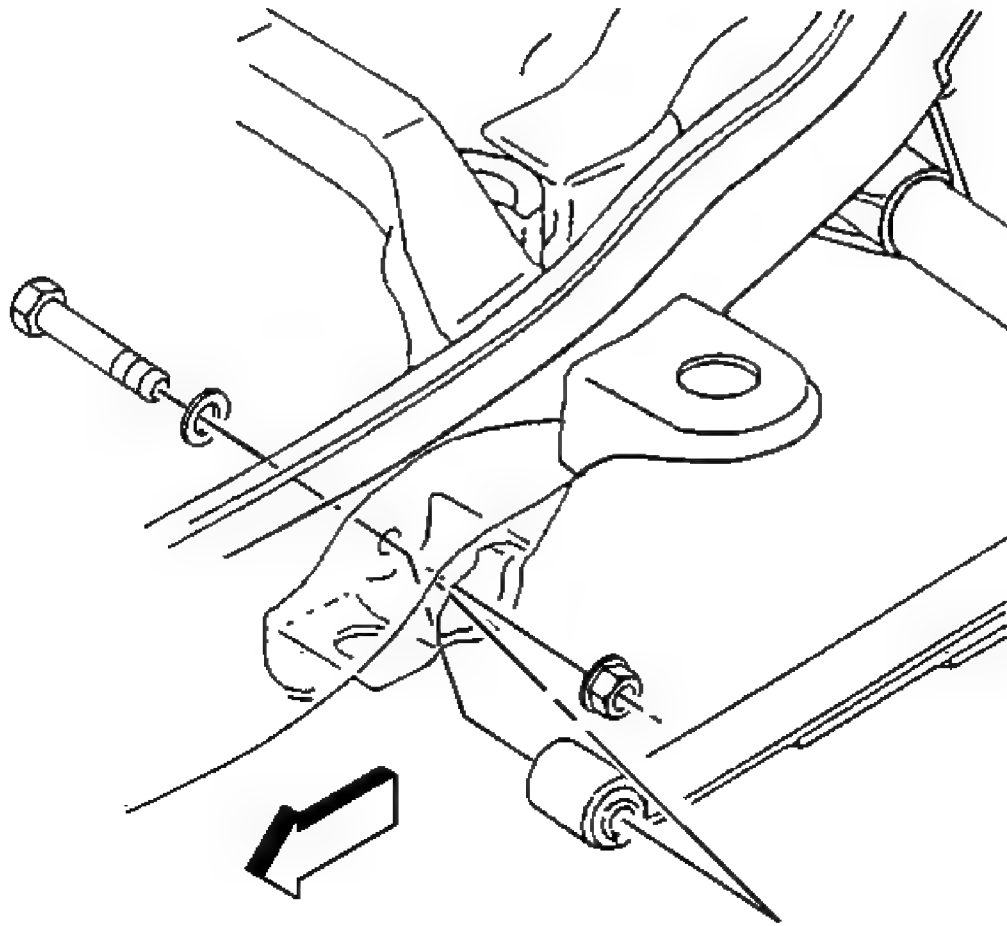


Fig. 30: View Of Leaf Spring
Courtesy of GENERAL MOTORS CORP.

1. Install the leaf spring to the vehicle.

IMPORTANT: Do not tighten the nut.

2. Install the leaf spring to front bracket mounting bolt and nut.

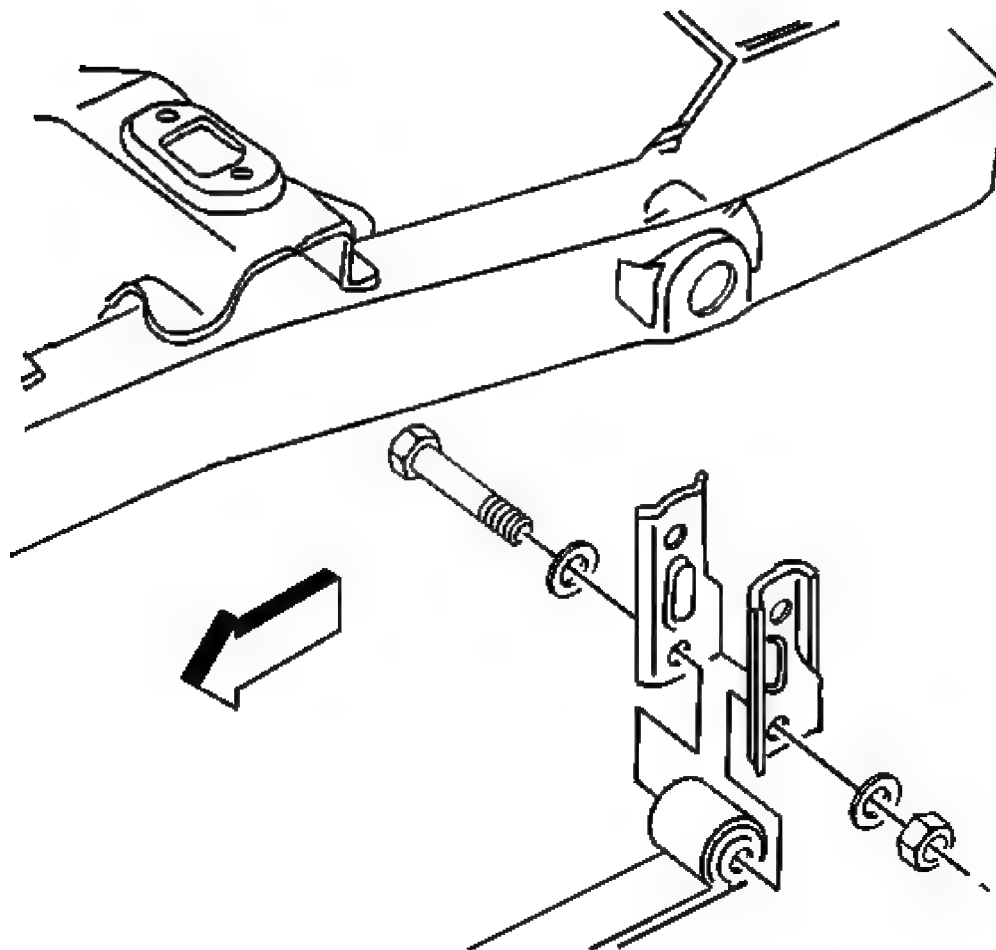


Fig. 31: View Of Spring Shackle To Leaf Spring Mounting Nut & Bolt
Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Do not tighten the nut.

3. Install the leaf spring to shackle mounting bolt and nut.

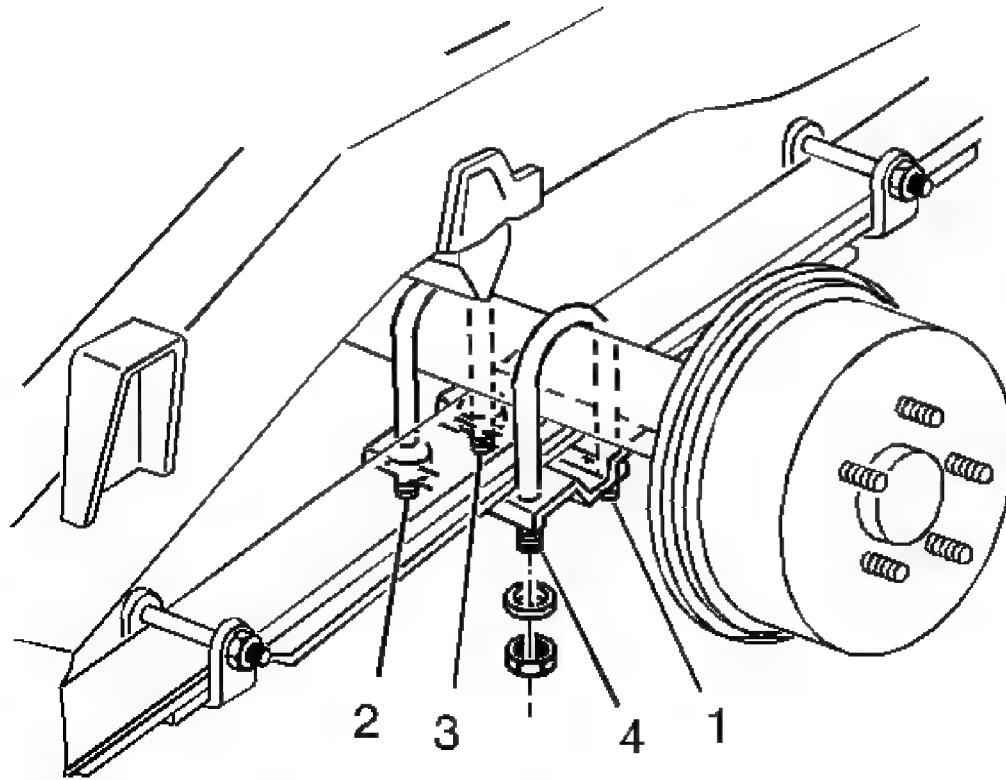


Fig. 32: View Of Leaf Spring U-Bolts
Courtesy of GENERAL MOTORS CORP.

4. Rotate the anchor plate to the proper position.
5. Install the leaf spring U-bolts.

NOTE: Refer to Fastener Notice in Cautions and Notices.

6. Install the leaf spring U-bolt retaining nuts.

Tighten:

- A. Tighten the leaf spring U-bolt retaining nuts to 25 N.m (18 lb ft) in the sequence shown.
- B. Then tighten the leaf spring U-bolt retaining nuts to 100 N.m (73 lb ft) in the sequence shown.

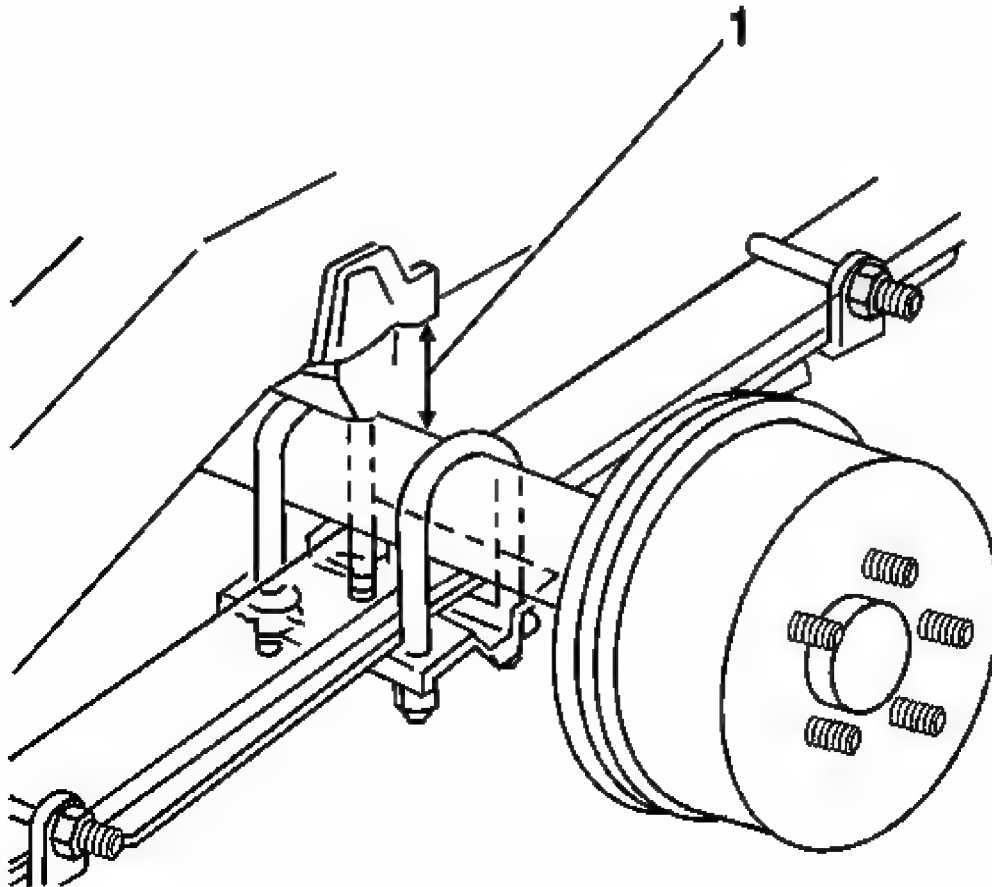


Fig. 33: Locating Bumper Bracket
Courtesy of GENERAL MOTORS CORP.

7. Raise the axle support so that there is a distance of 164-176 mm (6.46-6.94 in) between the axle tube and the metal surface of the bumper bracket (1).
8. Tighten the leaf spring to front bracket mounting nut.

Tighten: Tighten the leaf spring to front bracket mounting nut to 122 N.m (89 lb ft).

9. Tighten the leaf spring to spring shackle mounting nut.

Tighten: Tighten the leaf spring to spring shackle mounting nut to 122 N.m (89 lb ft).

10. Remove axle support.
11. Install the muffler, if necessary. Refer to **Muffler Replacement (Pickup 4.3L)** or **Muffler Replacement (Utility 4.3L)** in Engine Exhaust.

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12. Install the spare tire, if necessary.
13. Install the EVAP canister 2-door utilities only, except ZR2 models. Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls - 4.3L.
14. Install the fuel tank except crew cab and ZR2 models. Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls - 4.3L.
15. Lower the vehicle.

SPRING SHACKLE REPLACEMENT

Removal Procedure

1. Raise and suitably support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the fuel tank (2-door utilities only). Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls-4.3 L.
3. Remove the EVAP canister (2-door utilities only), if necessary. Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls-4.3 L.
4. Remove the spare tire, if necessary.
5. Disconnect rear exhaust hangers and lower exhaust system, if necessary.
6. Support the rear axle.

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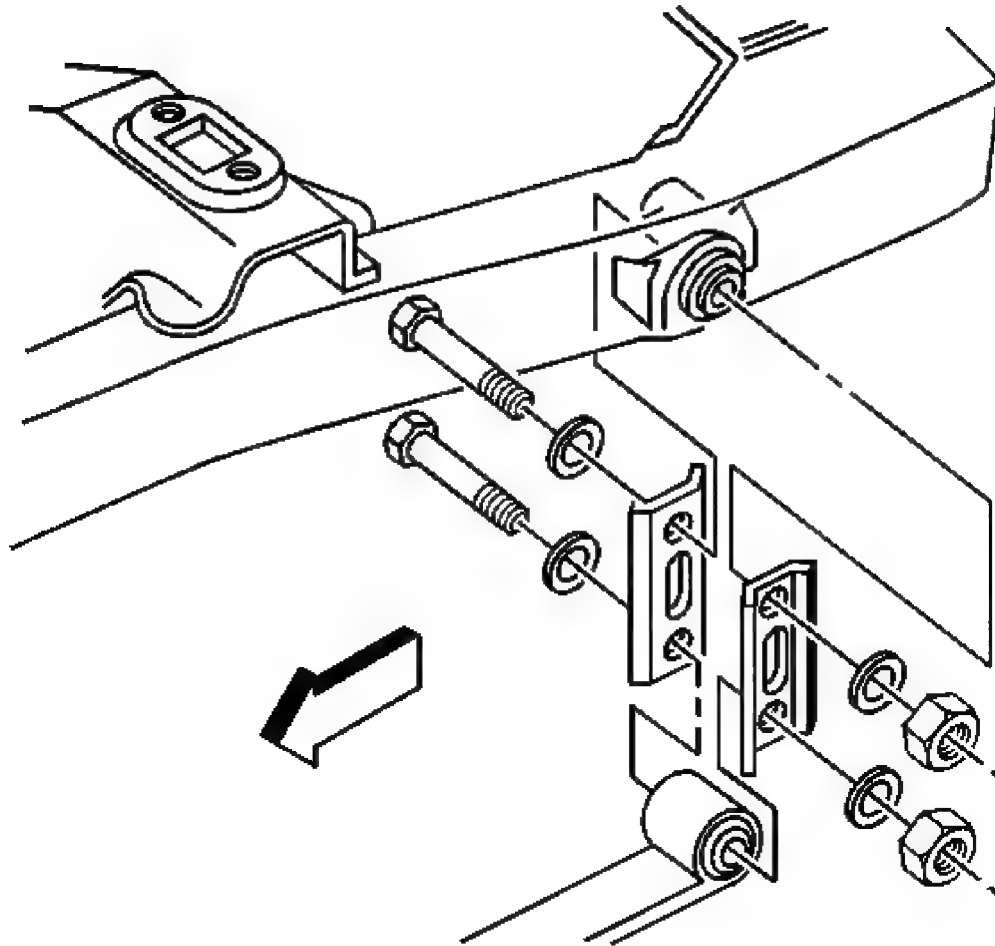


Fig. 34: View Of Spring Shackle
Courtesy of GENERAL MOTORS CORP.

7. Remove the frame to spring shackle mounting nut and bolt.
8. Remove the leaf spring to spring shackle mounting nut and bolt.
9. Remove the spring shackle from the vehicle.

Installation Procedure

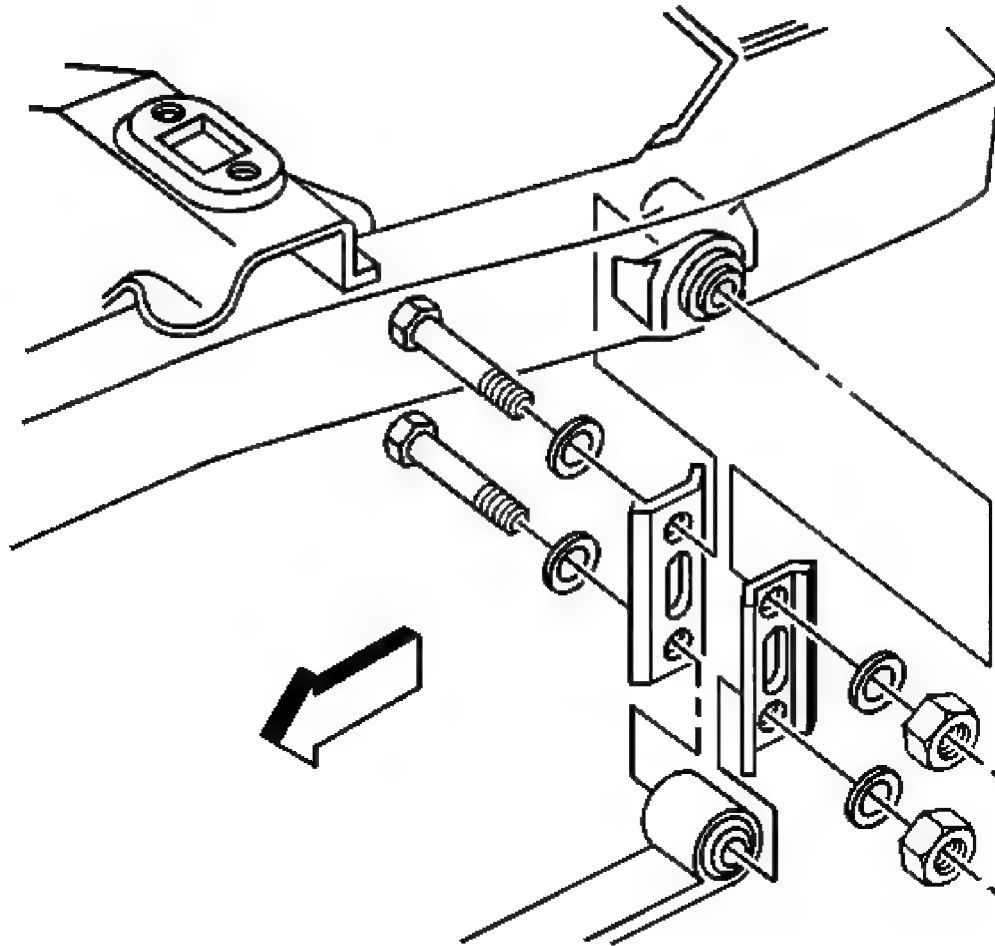


Fig. 35: View Of Spring Shackle
Courtesy of GENERAL MOTORS CORP.

1. Install the spring shackle to the vehicle.
2. Install the spring shackle to leaf spring mounting bolt and nut.

Do not tighten the nut.

3. Install the frame to the spring shackle mounting bolt and nut.

Do not tighten the nut.

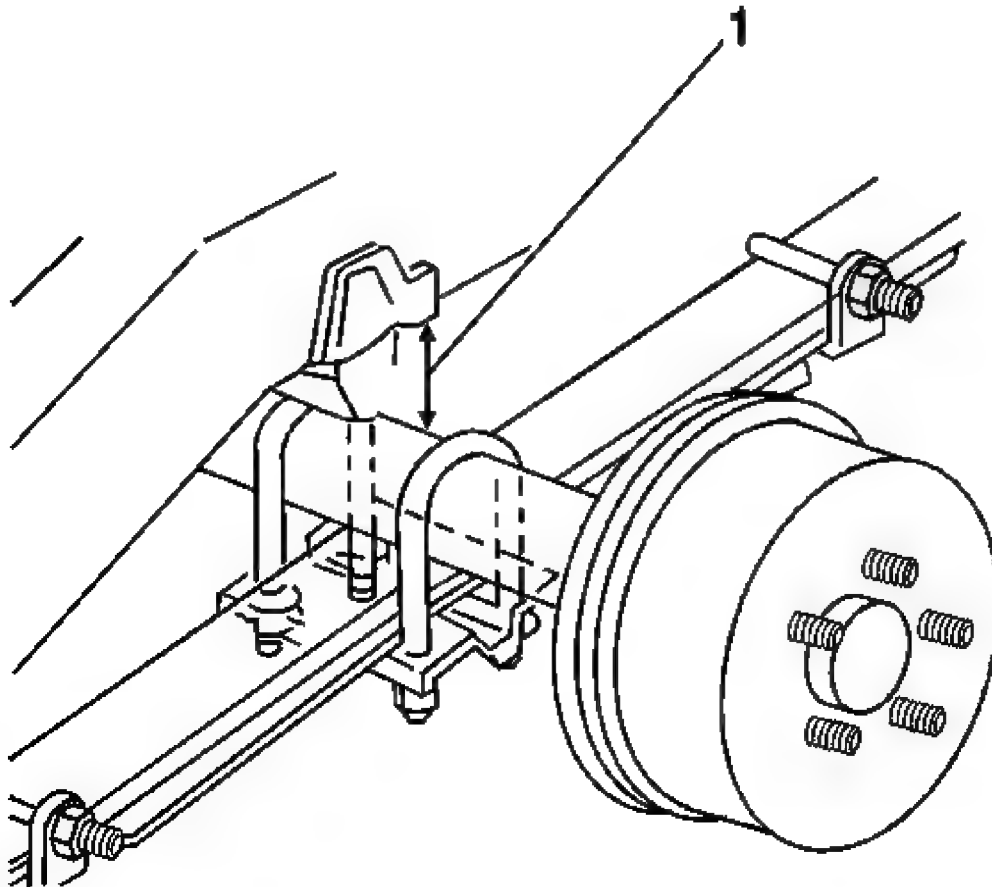


Fig. 36: Locating Bumper Bracket
Courtesy of GENERAL MOTORS CORP.

4. Raise the axle support so that there is a distance of 164-176 mm (6.46-6.94 in) between the axle tube and the metal surface of the bumper bracket (1).

NOTE: Refer to Fastener Notice in Cautions and Notices.

5. Tighten the spring shackle mounting nuts.

Tighten: Tighten the spring shackle mounting nuts to 122 N.m (89 lb ft).

6. Remove rear axle support.
7. Raise exhaust system and connect rear exhaust hangers, if necessary.
8. Install the spare tire, if necessary.

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9. Install the EVAP canister (2-door utilities only), if necessary. Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls - 4.3 L.
10. Install the fuel tank (2-door utilities only). Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls - 4.3 L.
11. Lower the vehicle.

SHACKLE BUSHING REPLACEMENT

Tools Required

J 21474-01 Control Arm Bushing Service Kit

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the fuel tank (2-door utilities only). Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls-4.3 L.
3. Remove the EVAP canister (2-door utilities only). Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls - 4.3 L.
4. Remove spare tire on, if necessary.
5. Disconnect rear exhaust hangers and lower exhaust system, if necessary.
6. Support the rear axle.

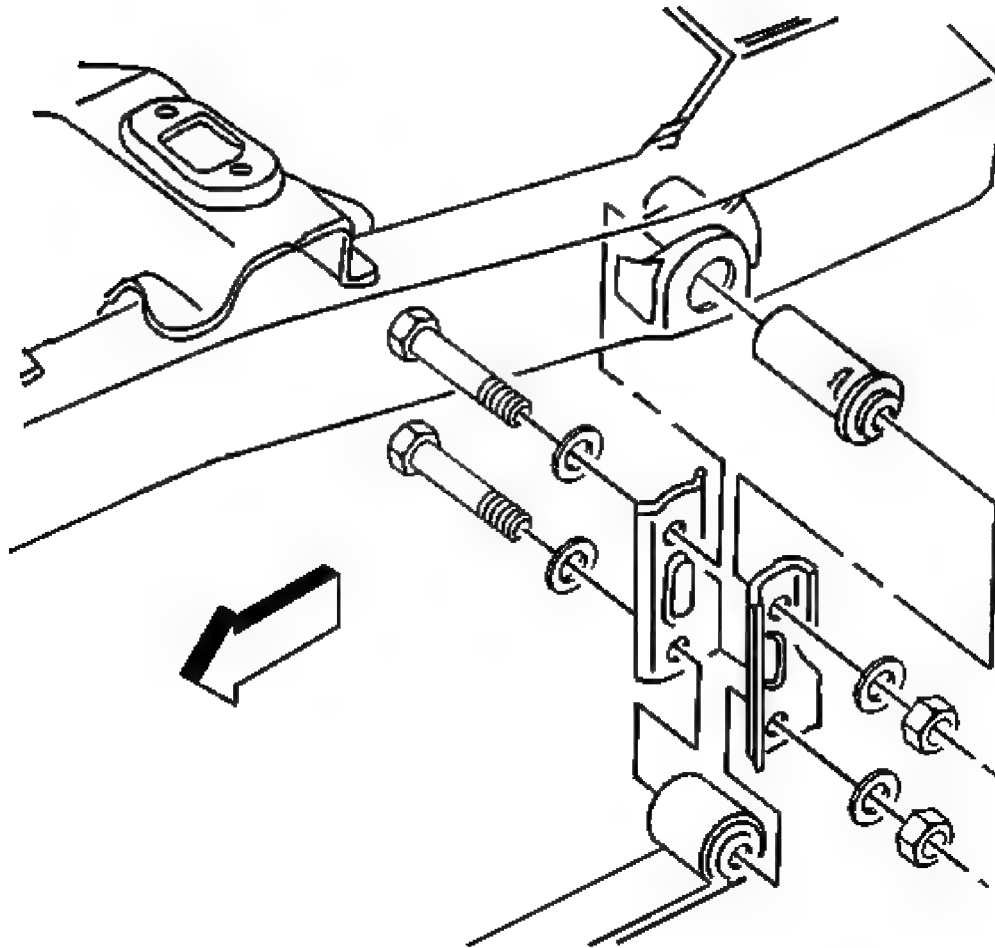


Fig. 37: View Of Spring Shackle
Courtesy of GENERAL MOTORS CORP.

7. Remove the spring shackle to frame mounting nut and bolt.
8. Loosen the lower spring shackle mounting bolt at the leaf spring.

Leave the bolt attached.
9. Lower the axle until there is enough clearance to remove the spring shackle bushing.
10. Use a blunt punch to straighten out the bushing flange that comes through the inner frame.

IMPORTANT: Replace both of the spring shackle bushings while the fuel tank is removed from the vehicle.

11. Remove the spring shackle bushing using **J 21474-01** .
12. Repeat steps 7 through 11 for other spring shackle bushing.

Installation Procedure

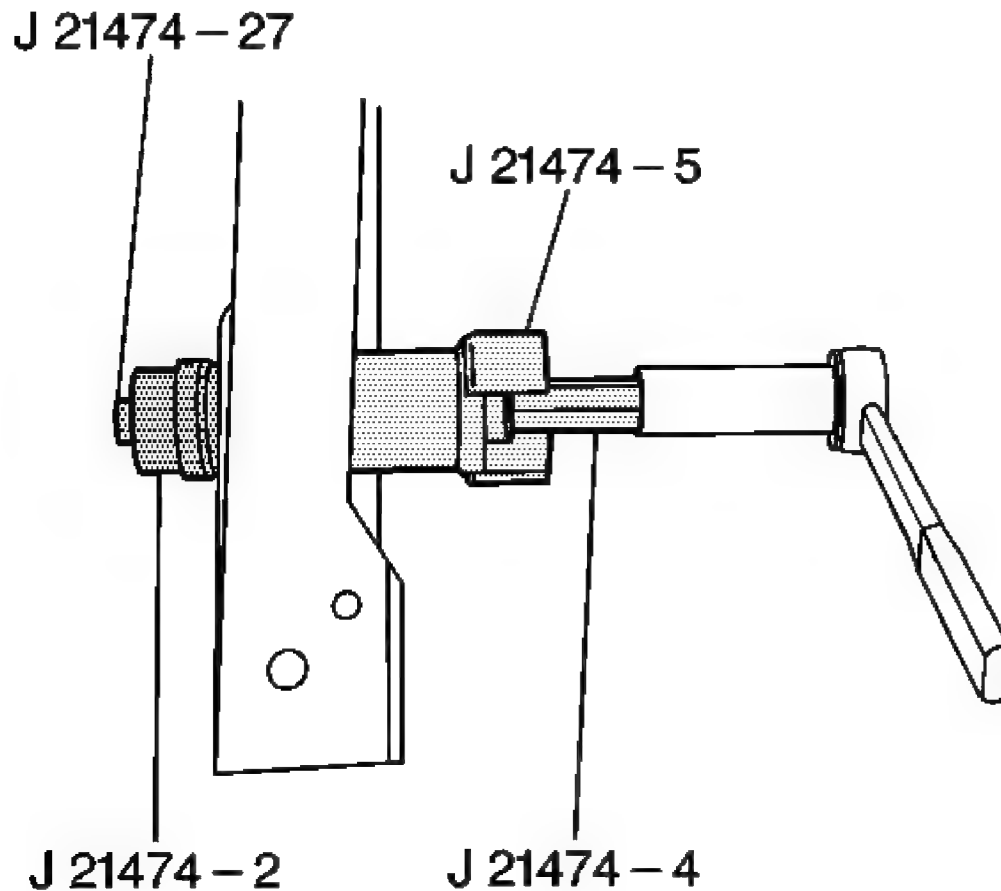


Fig. 38: Installing Spring Shackle Bushing
Courtesy of GENERAL MOTORS CORP.

1. Install the new spring shackle bushing using **J 21474-01** .
2. Pull the spring shackle bushing into the frame rail until the flanged portion of the spring shackle bushing is flush with the rail.
3. Stake the spring shackle bushing inner flange.
4. Raise the axle into position.

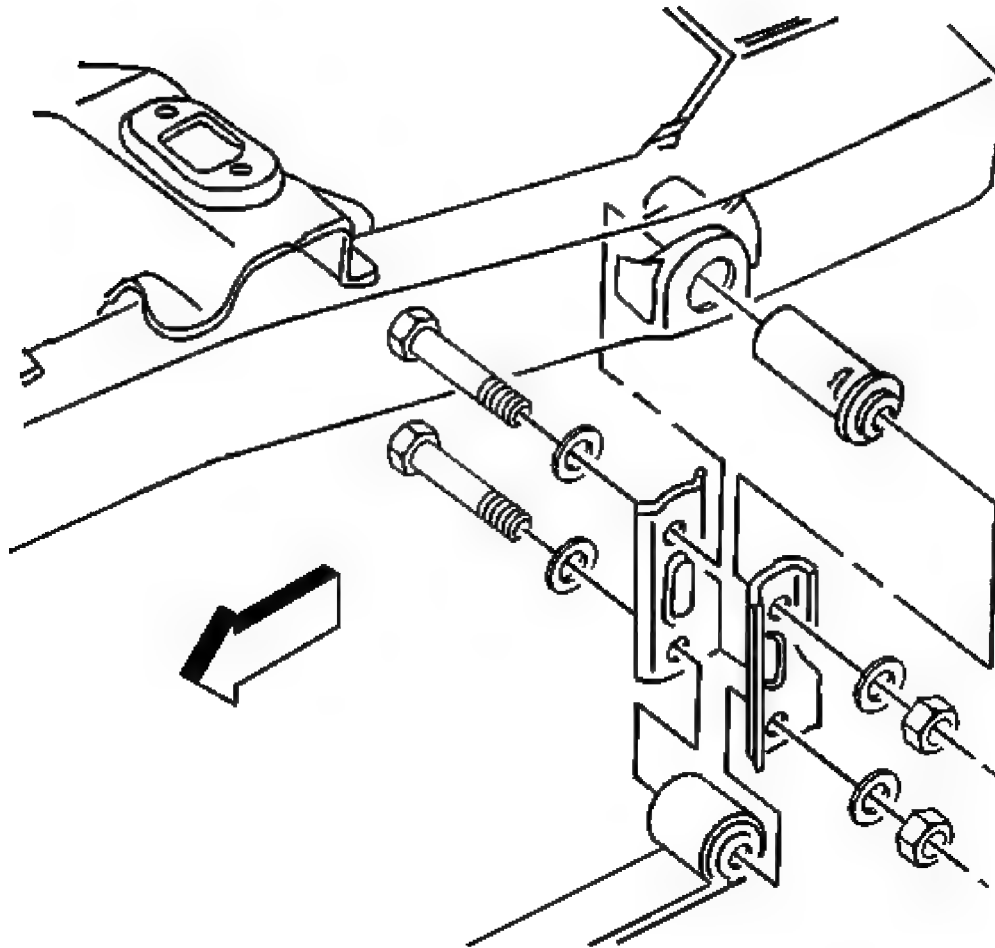


Fig. 39: View Of Spring Shackle
Courtesy of GENERAL MOTORS CORP.

5. Install the spring shackle to frame mounting bolt and nut.

Do not tighten the nut.

6. Repeat steps 1 through 6 for the other spring shackle bushing.

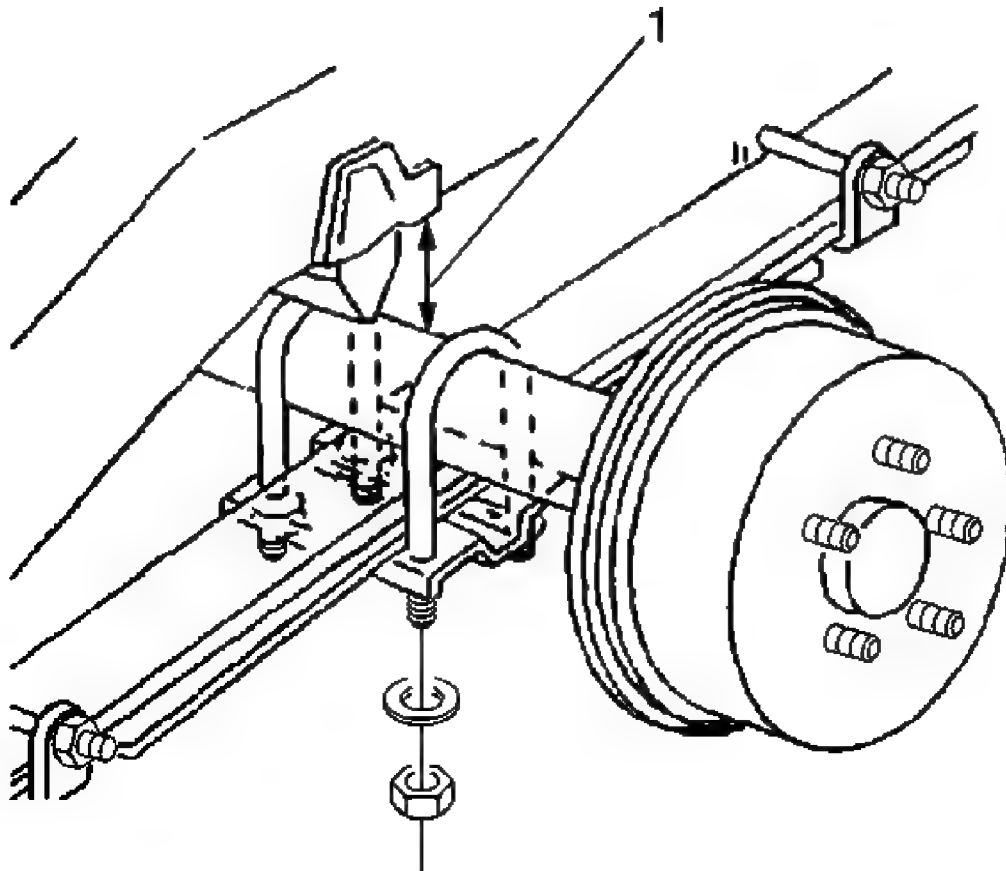


Fig. 40: Locating Bumper Bracket
Courtesy of GENERAL MOTORS CORP.

7. Raise the axle support so that there is a distance of 164-176 mm (6.46-6.94 in) between the axle tube and the metal surface of the bumper bracket (1).

NOTE: Refer to Fastener Notice in Cautions and Notices.

8. Tighten the spring shackle mounting nuts.

Tighten: Tighten the rear spring shackle nuts to 122 N.m (89 lb ft).

9. Remove the rear axle support.
10. Raise the exhaust system and connect the rear exhaust hangers, if necessary
11. Install the spare tire, if necessary.

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12. Install the EVAP canister (2-door utilities only). Refer to **Evaporative Emission (EVAP) Canister Replacement (Pickup)** or **Evaporative Emission (EVAP) Canister Replacement (2-Door Utility)** in Engine Controls - 4.3 L.
13. Install the fuel tank (2-door utilities only). Refer to **Fuel Tank Replacement (Pickup)** , **Fuel Tank Replacement (2-Door Utility)** or **Fuel Tank Replacement (4-Door Utility)** in Engine Controls-4.3 L.
14. Lower the vehicle.

WHEEL STUD REPLACEMENT

Tools Required

J 43631 Ball Joint Separator

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
3. Remove the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.

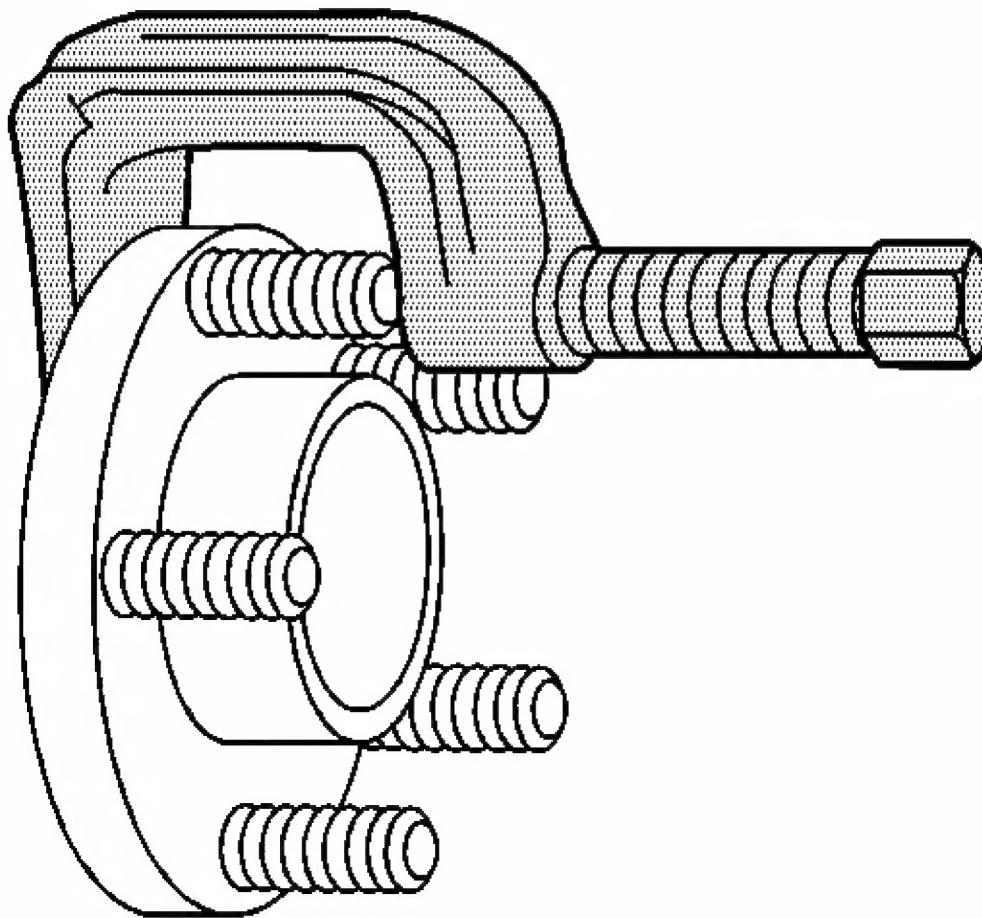


Fig. 41: Removing Wheel Stud From Axle Flange
Courtesy of GENERAL MOTORS CORP.

4. Remove the wheel stud from the axle flange using the **J 43631** .

Installation Procedure

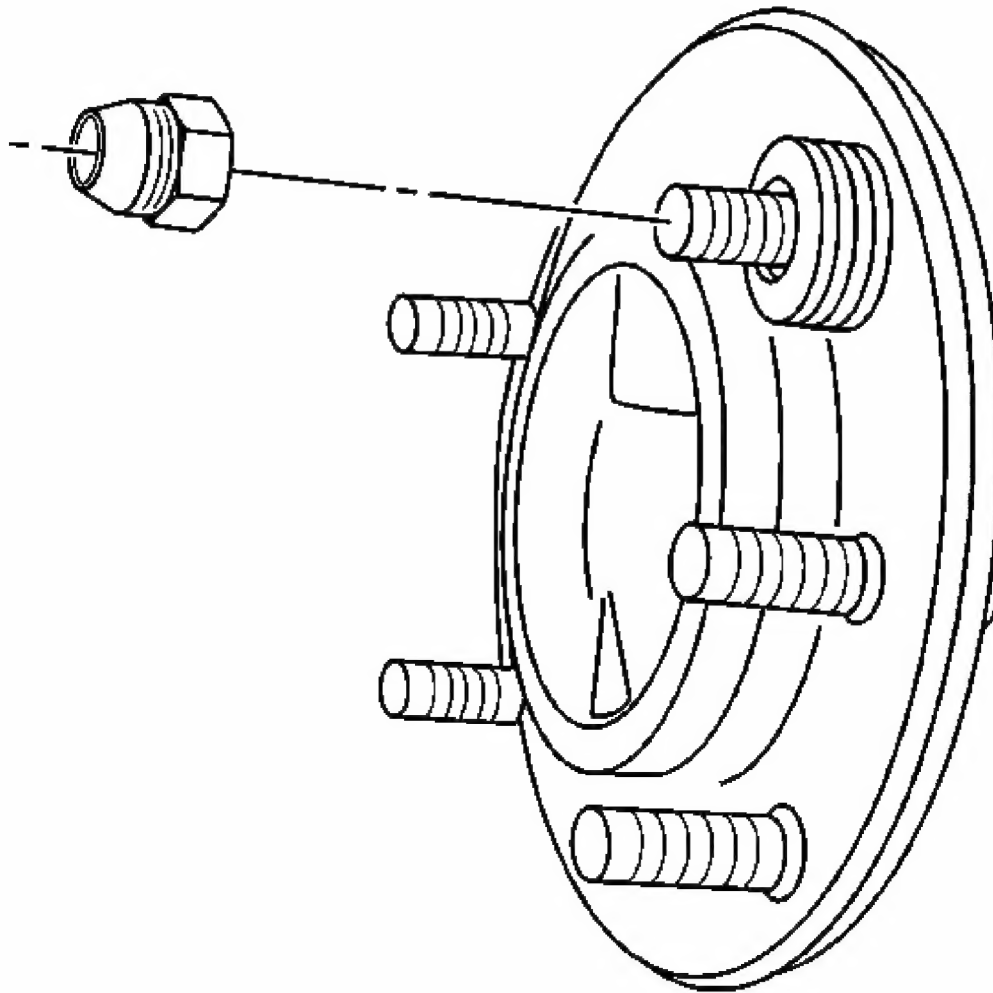


Fig. 42: View Of Axle Flange Stud
Courtesy of GENERAL MOTORS CORP.

1. Install the stud into the axle flange.
2. Install the 4 washers and the lug nut to the stud.
3. Tighten the lug nut in order to draw the stud into the flange until the stud fully seats.
4. Remove the lug nut and the washers.
5. Install the rotor. Refer to **Brake Rotor Replacement - Rear** in Disc Brakes.
6. Install the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
7. Lower the vehicle.

DESCRIPTION AND OPERATION

GENERAL DESCRIPTION

These vehicles use a leaf spring and a solid rear axle suspension system.

The rear axle assembly is attached to multi-leaf springs with U-bolts. The front ends of the springs are attached to the frame at the front hangers with rubber bushings. The rear ends of the springs are attached to the frame with shackles that use rubber bushings. Shackles allow the springs to change position while the vehicle is in motion.

Two direct double-acting shock absorbers provide ride control. The shock absorbers are angle-mounted between the frame. The shock absorbers are attached with brackets. The brackets are attached to the anchor plate.

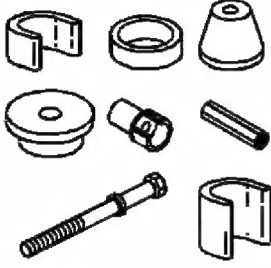
The rear spring steel stabilizing shaft helps minimize body roll and sway during cornering. The rear stabilizer shaft is connected to the rear axle and the frame with the following components:

- The rubber insulators
- The clamps
- The link assemblies

SPECIAL TOOLS AND EQUIPMENT

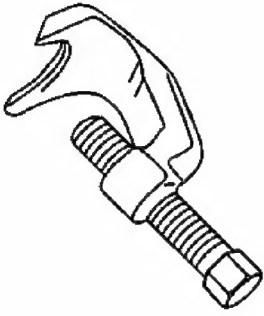
SPECIAL TOOLS

Special Tools

Illustration	Tool Number/Description
	<p>J 21474-01 Control Arm Bushing Set</p>

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J 43631
Ball Joint Remover